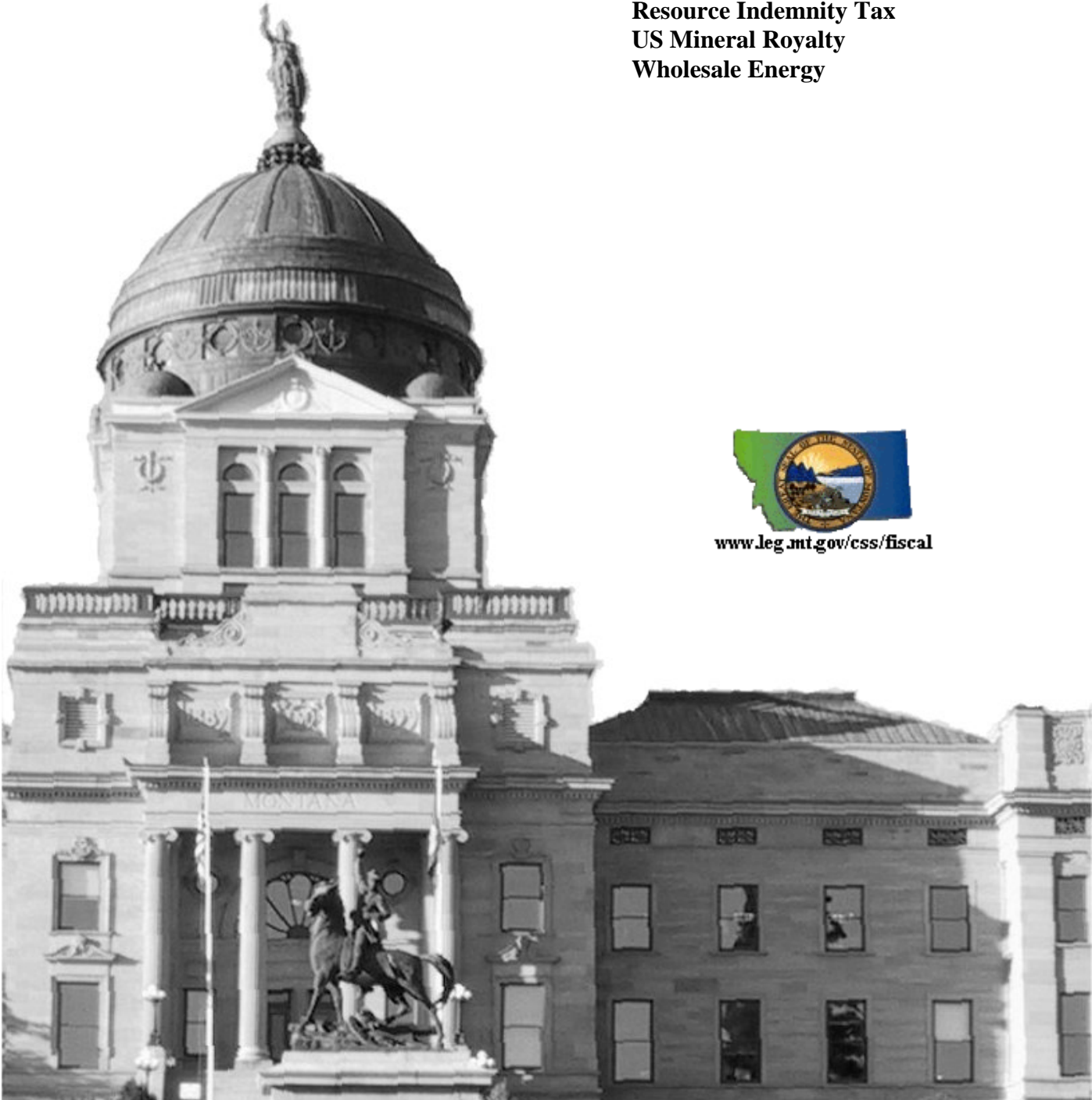


# Natural Resource Taxes

**Coal Severance Tax**  
**Electrical Energy Tax**  
**Federal Forest Receipts**  
**Metalliferous Mines Tax**  
**Oil & Natural Gas Production Tax**  
**Resource Indemnity Tax**  
**US Mineral Royalty**  
**Wholesale Energy**



[www.leg.mt.gov/css/fiscal](http://www.leg.mt.gov/css/fiscal)



# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Severance Tax

**Revenue Description:** For large producers, the coal severance tax is imposed on all coal production in excess of 20,000 tons per company per calendar year. However, producers of 50,000 tons or less in any calendar year are exempt from the tax.

#### Statutory Reference:

Tax Rate (MCA) – 15-35-103

Tax Distribution (MCA) – Montana Constitution, Article IX, Section 5; 15-35-108

Date Due – the report to the Department of Revenue and tax is due 30 days following the close of the quarter (15-35-104)

**Applicable Tax Rate(s):**

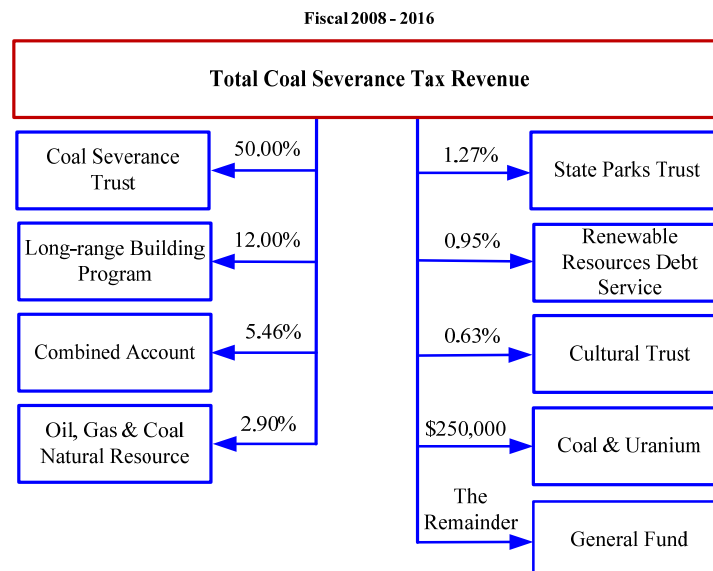
- 10.0% - on the value of surfaced mined coal with a heating quality < 7,000 BTU
- 15.0% - on the value surfaced mined coal with a heating quality ≥ 7,000 BTU
- 3.0% - on the value underground mined coal with a heating quality < 7,000 BTU
- 4.0% - on the value underground mined coal with a heating quality ≥ 7,000 BTU

#### Distribution: (Percentage)

Account Name	Fiscal 1998 - 1999	Fiscal 2000 - 2002	Fiscal 2003	Fiscal 2004 - 2005	Fiscal 2006 - 2007	Fiscal 2008 - 2016
Permanent Trust	25.000	0.000	0.000	12.500	0.000	0.000
Treasure State Endowment	25.000	37.500	37.500	25.000	25.000	25.000
TSEP Regional Water	0.000	12.500	12.500	12.500	12.500	12.500
Big Sky Economic Development	0.000	0.000	0.000	0.000	12.500	12.500
LRBP-Cash Account	12.000	12.000	10.000	12.000	12.000	12.000
Oil, Gas & Coal Natural Resource	0.000	0.000	0.000	0.000	2.900	2.900
Shared Account *	8.360	8.360	6.010	7.750	5.460	5.460
Park Acquisition Trust	1.270	1.270	0.000	1.270	1.270	1.270
Water Development	0.950	0.950	0.950	0.950	0.950	0.950
Cultural Trust	0.000	0.630	0.000	0.630	0.630	0.630
Coal & Uranium	0.000	0.000	0.000	0.000	0.000	\$250,000
LRBP-Debt Service	1.300	0.000	0.000	0.000	0.000	0.000
Cultural & Aesthetic Projects	0.870	0.000	0.000	0.000	0.000	0.000
General Fund	25.250	26.790	33.040	27.400	26.790	Remainder

\* Used for Growth Through Agriculture, State Library, Conservation Districts, Coal Board (before FY 2006), and County Land Planning (before FY 2004)

#### Distribution Chart:



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Severance Tax

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**Collection Frequency:** Quarterly: The coal severance tax is due 30 days after the end of the quarter.

#### % of Total General Fund Revenue:

FY 2004 - 0.63%	FY 2007 - 0.59%
FY 2005 - 0.67%	FY 2008 - 0.61%
FY 2006 - 0.56%	

#### Revenue Estimate Methodology:

The coal severance tax is applied to the value of coal produced. The coal severance tax estimate is developed by estimating the annual contract sales price and production for each producing coal company and any company anticipated to be producing within the 3-year period in question. From these estimates, taxable value can be determined to which is applied the tax rate. Since all production and price information is reported on a calendar year basis, the resulting calendar year estimates are converted into fiscal year estimates.

#### Data

Major coal companies are surveyed for anticipated production levels and general indications of coal prices. In addition, a review is performed of historical trends and current literature on coal prices. Data from quarterly reports produced by DOR provide a history of production and prices for individual coal companies. These companies are:

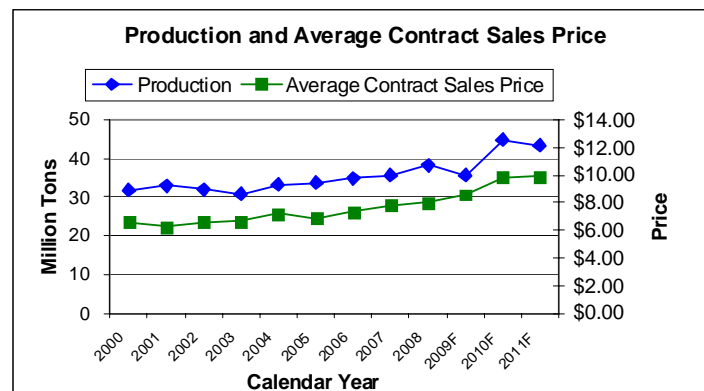
Decker Coal Company  
Spring Creek Coal Company  
Western Energy Company  
Westmoreland Savage Corporation  
Signal Peak (Bull Mountain)

#### Analysis

The taxable value of coal is determined in a three-step process:

1. The future coal production for each company, as reported on the survey, is reduced by the exempt amount of 20,000 tons to get taxable tons.
2. To determine the future price for each company's coal, the company's average contract sales price for the last year increased by 2.0 percent. The average contract sales price for all companies is shown in the figure below.
3. The estimated production and price for each company are multiplied together and the product for all companies summed to obtain the total taxable value.

The taxable value is multiplied by the applicable tax rate (4, 10 or 15 percent) to determine total coal severance tax revenue. At this point the total represents estimates for calendar years. To convert the estimates to a fiscal year basis, half the previous calendar year's estimate is added to the half of the current calendar year's estimate.



# Legislative Fiscal Division

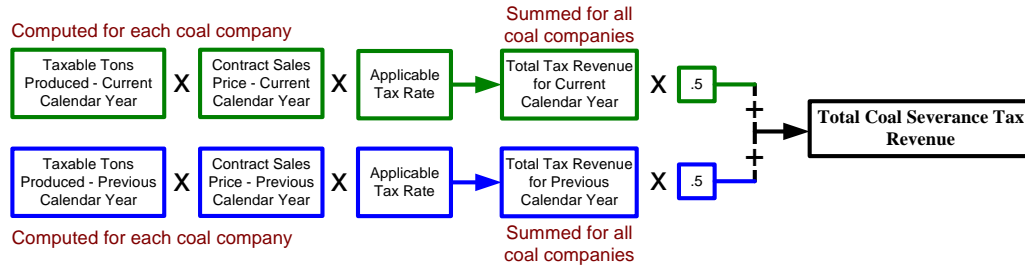
## Revenue Estimate Profile

### Coal Severance Tax

#### Adjustments and Distribution

Once total tax revenue for each fiscal year is determined, the applicable distribution percentages are applied.

#### Forecast Methodology:



#### Revenue Estimate Assumptions:

	t	Total Tax	GF Tax	GF Allocation	Tons (FY)	CSP (FY)	Fiscal	Coal/
	Fiscal	Millions	Millions	Percent	Millions	Dollars	Effective	Uranium
Actual	2000	35.469791	9.502357	0.267900	33.592584	6.748571	0.156460	
Actual	2001	32.337172	8.663128	0.267900	32.318260	6.230669	0.160590	
Actual	2002	31.614047	8.469404	0.267900	33.148533	6.379990	0.149484	
Actual	2003	29.423547	9.721540	0.330400	30.245710	6.486913	0.149966	
Actual	2004	31.544681	8.643243	0.274000	31.834417	7.218346	0.137275	
Actual	2005	37.634511	10.311856	0.274000	34.191373	6.993260	0.157395	
Actual	2006	35.821524	9.596586	0.267900	34.107005	7.005267	0.149926	
Actual	2007	40.758738	10.919266	0.267900	34.611396	7.551943	0.155935	0.000000
Actual	2008	45.331871	11.894408	0.262385	37.404304	8.133265	0.143215	0.250000
Forecast	2009	44.264000	12.410000	0.267900	37.054500	8.281584	0.144242	0.250000
Forecast	2010	46.096000	12.183000	0.267900	40.197500	9.283742	0.123519	0.250000
Forecast	2011	48.271000	12.959000	0.267900	44.036500	9.883076	0.110910	0.250000

	t	Tons (CY)	CSP (CY)	Tax	Tax	Calendar	Calendar
	Cal	Millions	Dollars	Rate	Rate	Tax	Effective
Actual	2000	31.784308	6.588243	0.150000	0.100000	31.253448	0.149250
Actual	2001	32.961265	6.266994	0.150000	0.100000	30.883924	0.149510
Actual	2002	31.980880	6.583257	0.150000	0.100000	31.441574	0.149339
Actual	2003	30.802151	6.680719	0.150000	0.100000	30.701209	0.149194
Actual	2004	33.365039	7.233763	0.150000	0.100000	36.030034	0.149282
Actual	2005	33.632110	6.888637	0.150000	0.100000	34.552929	0.149141
Actual	2006	34.903622	7.339225	0.150000	0.100000	37.918860	0.148025
Actual	2007	35.638107	7.832836	0.150000	0.100000	41.532547	0.148784
Actual	2008	38.412500	7.998869	0.150000	0.100000	45.605192	0.148427
Forecast	2009	35.696500	8.585809	0.150000	0.100000	42.921888	0.140046
Forecast	2010	44.698500	9.841116	0.150000	0.100000	49.268188	0.112003
Forecast	2011	43.374500	9.926318	0.150000	0.100000	47.271281	0.109793

Total Tax = Tons(FY) \* CSP(FY) \* Fiscal Effective

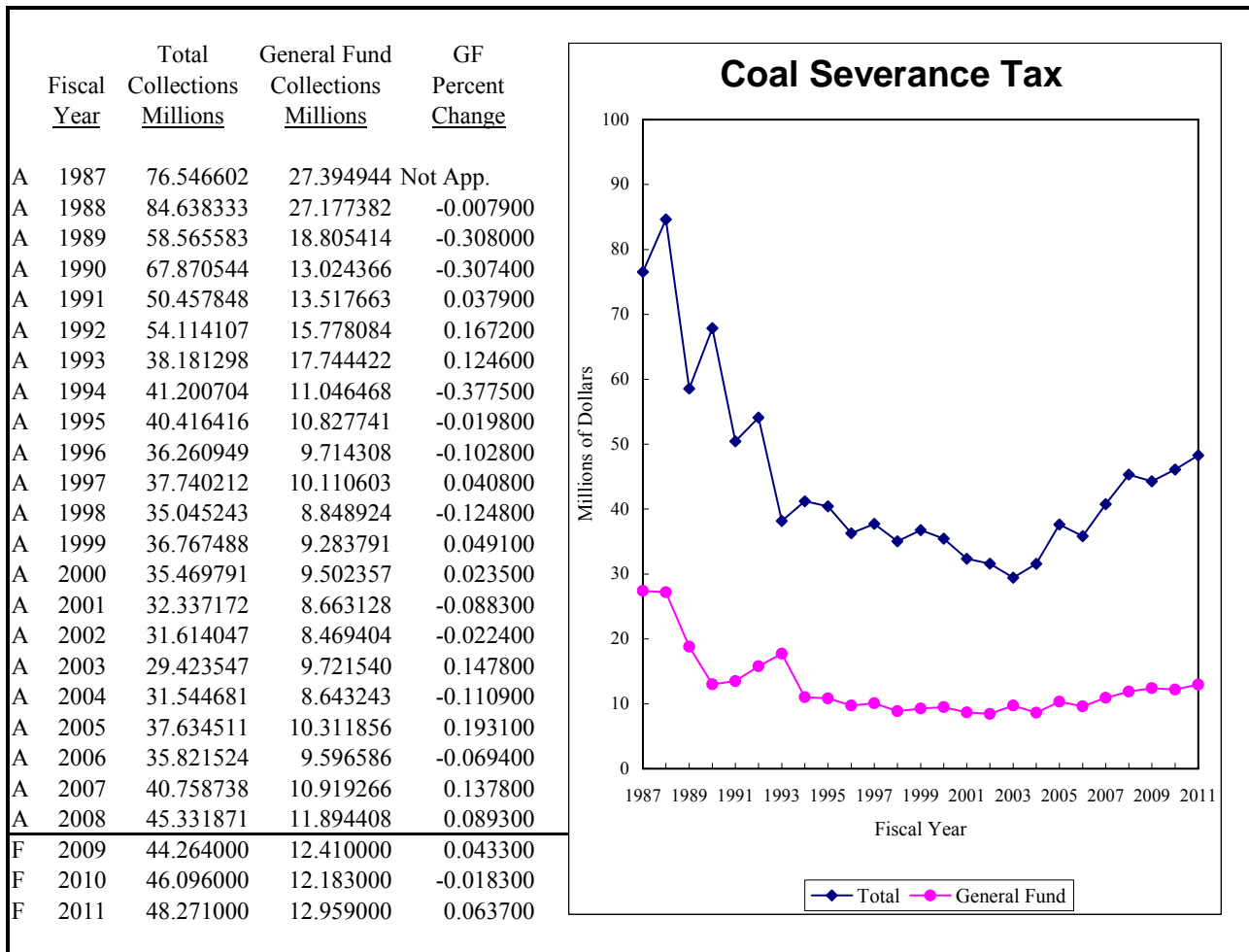
GF Tax = ( Tons(FY) \* CSP(FY) \* Fiscal Effective - Coal/Uranium ) \* GF Allocation

# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Severance Tax

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue Coal Tax Returns

**Contacts:** Coal Companies' Financial Personnel

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Electrical Energy Tax

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**Revenue Description:** The electrical energy license tax is imposed on each person or organization engaged in generating, manufacturing, or producing electrical energy in Montana. This tax is in addition to the wholesale energy transaction tax enacted by the 1999 legislature (HB 174).

**Statutory Reference:**

Tax Rate MCA) – 15-51-101

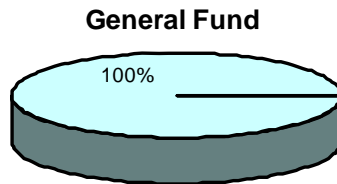
Tax Distribution (MCA) – 17-2-124(2), 15-51-103

Date Due – 30 days after the calendar quarter (15-51-101, 15-51-102)

**Applicable Tax Rate(s):** The tax of \$0.0002 per kilowatt-hour (or \$0.20 per megawatt-hour) is levied against all electrical energy produced within the state. A deduction is allowed for "actual and necessary" energy use by the plant for the production of the energy.

**Distribution:** All proceeds are deposited into the general fund.

Distribution Chart:



**Collection Frequency:** Quarterly: The electrical energy tax is due 30 days after the end of the quarter.

**% of Total General Fund Revenue:**

FY 2004 – 0.34%

FY 2007 – 0.25%

FY 2005 – 0.27%

FY 2008 – 0.26%

FY 2006 – 0.27%

**Revenue Estimate Methodology:**

The electrical energy tax is applied to the number of kilowatt hours of electricity produced. The estimate for the tax revenue is derived by estimating the annual taxable kilowatt hours produced by each company and any company anticipated to be producing within the 3-year period in question. From these production estimates, the tax rate is applied.

Data

All electrical energy producing companies are surveyed for anticipated kilowatt hours produced, anticipated new production, and anticipated downtime or reduced production. Results of the survey were incomplete and were not used in the estimate. Data from quarterly reports produced by DOR provide a history of kilowatt hours produced for each individual company.

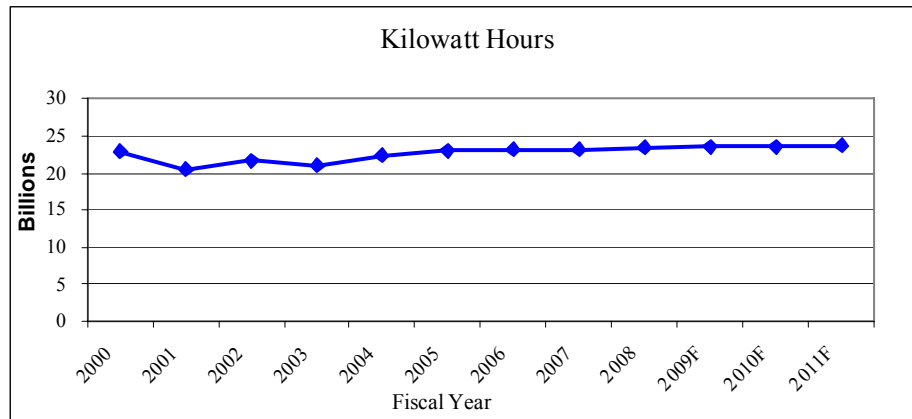
Analysis

FY 2008 known production in kilowatt hours and all subsequent years are multiplied by a growth factor derived by calculating the square root of the growth between FY 2005 and FY 2007. Taxable kilowatt hours are then multiplied by the tax rate to derive total revenue from this source.

# Legislative Fiscal Division

## Revenue Estimate Profile

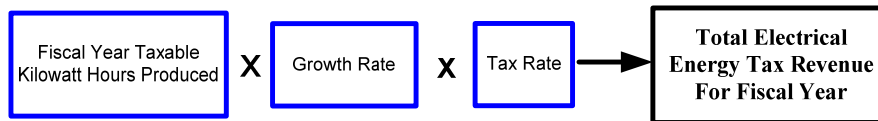
### Electrical Energy Tax



#### Adjustments and Distribution

Once total tax revenue for each fiscal year is determined, the applicable distribution percentage, 100 percent to the general fund, is applied.

#### Forecast Methodology:



#### Revenue Estimate Assumptions:

	t Fiscal	Total Tax Millions	GF Tax Millions	KWH Fiscal Millions	Credits Millions	Tax Rate
Actual	2000	4.829002	4.829002	22937.761931	0.000189	0.000200
Actual	2001	4.057952	4.057952	20444.170990	0.000000	0.000200
Actual	2002	4.197477	4.197477	21642.219243	0.000000	0.000200
Actual	2003	4.130019	4.130019	21068.970125	0.000000	0.000200
Actual	2004	4.660529	4.660529	22310.179496	0.000000	0.000200
Actual	2005	4.074409	4.074409	23065.262028	0.000000	0.000200
Actual	2006	4.644508	4.644508	23156.213077	0.000000	0.000200
Actual	2007	4.564404	4.564404	23159.175430	0.000000	0.000200
Actual	2008	5.179013	5.179013	23488.255737	0.000000	0.000200
Forecast	2009	4.707000	4.707000	23536.030849	0.000000	0.000200
Forecast	2010	4.717000	4.717000	23583.903136	0.000000	0.000200
Forecast	2011	4.727000	4.727000	23631.872795	0.000000	0.000200

Total Tax = KWH Fiscal \* Tax Rate - Credits

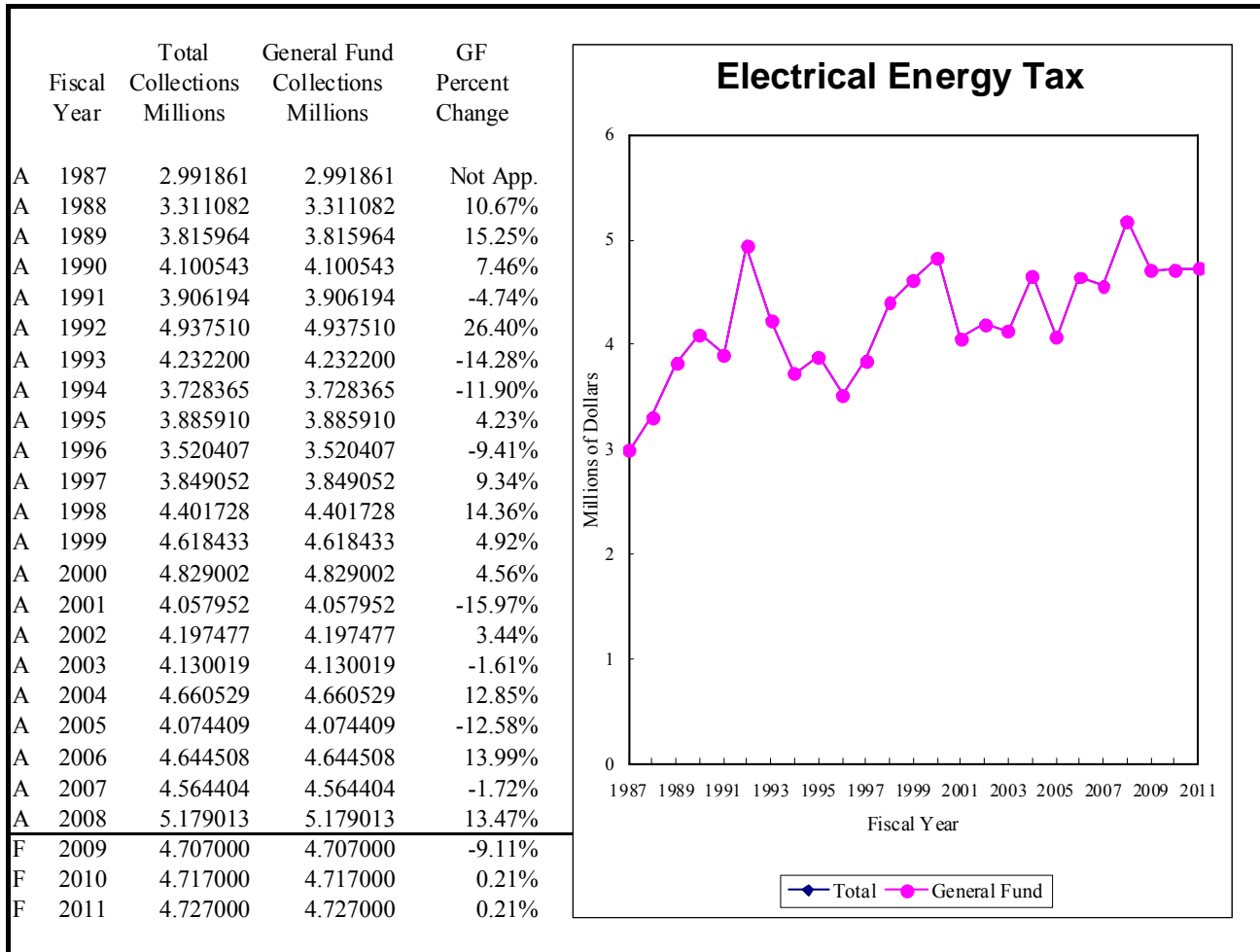
GF Tax = Total Tax

# Legislative Fiscal Division

## Revenue Estimate Profile

### Electrical Energy Tax

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue Electrical Energy Tax Returns

**Contacts:** Electrical Companies' Financial Personnel



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Federal Forest Receipts

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**Revenue Description:** The federal government authorizes logging operations on forest lands located within the borders of Montana. The sale of timber generates revenue that the federal government shares with the state in the following year. The state sends the money to the county treasurer of the county in which the receipts were generated. Within thirty days, the county treasurer distributes the money to various county and state accounts.

The previous formula for distributing federal forest payments terminated in FY 2008. In the federal Emergency Economic Stabilization Act of 2008 (the Bailout Bill), a new formula for the distribution of forest receipts was enacted. The new formula for FY 2009 through FY 2012 considers acres of federal land within an eligible county, the average three highest 25-percent payments made to each eligible state for each eligible county under the previous formula, and an income adjustment based on the per capita personal income for each county. As before, not more than 20 percent but at least 15 percent must be used by county governments for projects on federal lands. The remainder is distributed as below.

#### Statutory Reference:

Tax Rate – NA

Tax Distribution MCA) – 17-3-211, 17-3-212

Date Due – the state treasurer distributes the funds within 30 days after receiving full payment

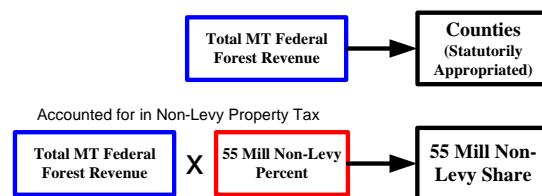
**Applicable Tax Rate(s):** N/A

**Distribution:** The county treasurer apportions federal forest receipts in the following manner:

- 66 2/3% to the general fund of the county
- 33 1/3% to the following county wide accounts, based on the mill ratios of each to total mills in the current year:
  - the county equalization accounts (55 mills)
  - the county transportation account
  - the county retirement accounts

This revenue source represents one component used to calculate total non-levy property tax revenue.

#### Distribution Chart:



**Collection Frequency:** Twice annually (usually October and December).

**% of Total General Fund Revenue:** Non levy is included in “Property Tax: 55 mills”.

**Revenue Estimate Methodology:** A number of analytical techniques are used to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable assumptions used to develop the revenue estimate for this source are provided in the “Revenue Estimate Assumptions” section of this document. The following summarizes the process used to develop the revenue estimate.

With the passage of the federal Emergency Economic Stabilization Act of 2008 (the Bailout Bill), the amount available to each

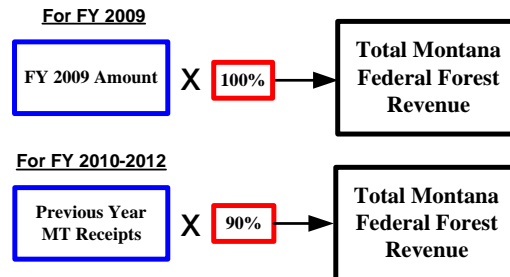
# Legislative Fiscal Division

## Revenue Estimate Profile

### Federal Forest Receipts

county for FY 2009 is known and declines ten percent per year until FY 2012, after which the act sunsets. The general fund share will vary because of this and as a result of changes in the 55 mill share as a percent of the total countywide school mills.

#### Forecast Methodology:



#### Revenue Estimate Assumptions:

	t	Total Tax	GF Tax	CPI Percent	50% CPI %	Secure
	Fiscal	Millions	Millions	Change	Change	Rural Schools
						Millions
Actual	2000	6.283122	0.000000	3.3613%		
Actual	2001	7.185037	0.000000	2.7875%		
Actual	2002	13.474861	0.000000	1.6384%		
Actual	2003	12.478757	0.000000	2.2790%	0.8000%	
Actual	2004	12.490680	0.000000	2.6630%	1.1395%	
Actual	2005	12.431155	0.000000	3.3880%	1.3315%	
Actual	2006	12.799829	0.000000	3.2258%	1.6940%	
Actual	2007	12.934779	0.000000	2.8274%	1.6129%	
Actual	2008	13.027514	0.000000	3.9556%	1.4137%	
Actual	2009	26.953000	0.000000	-0.8817%	1.9778%	26.953258
Actual	2010	24.258000	0.000000	2.3876%	-0.4409%	24.257932
Actual	2011	21.832000	0.000000	2.9721%	0.011938	21.832139

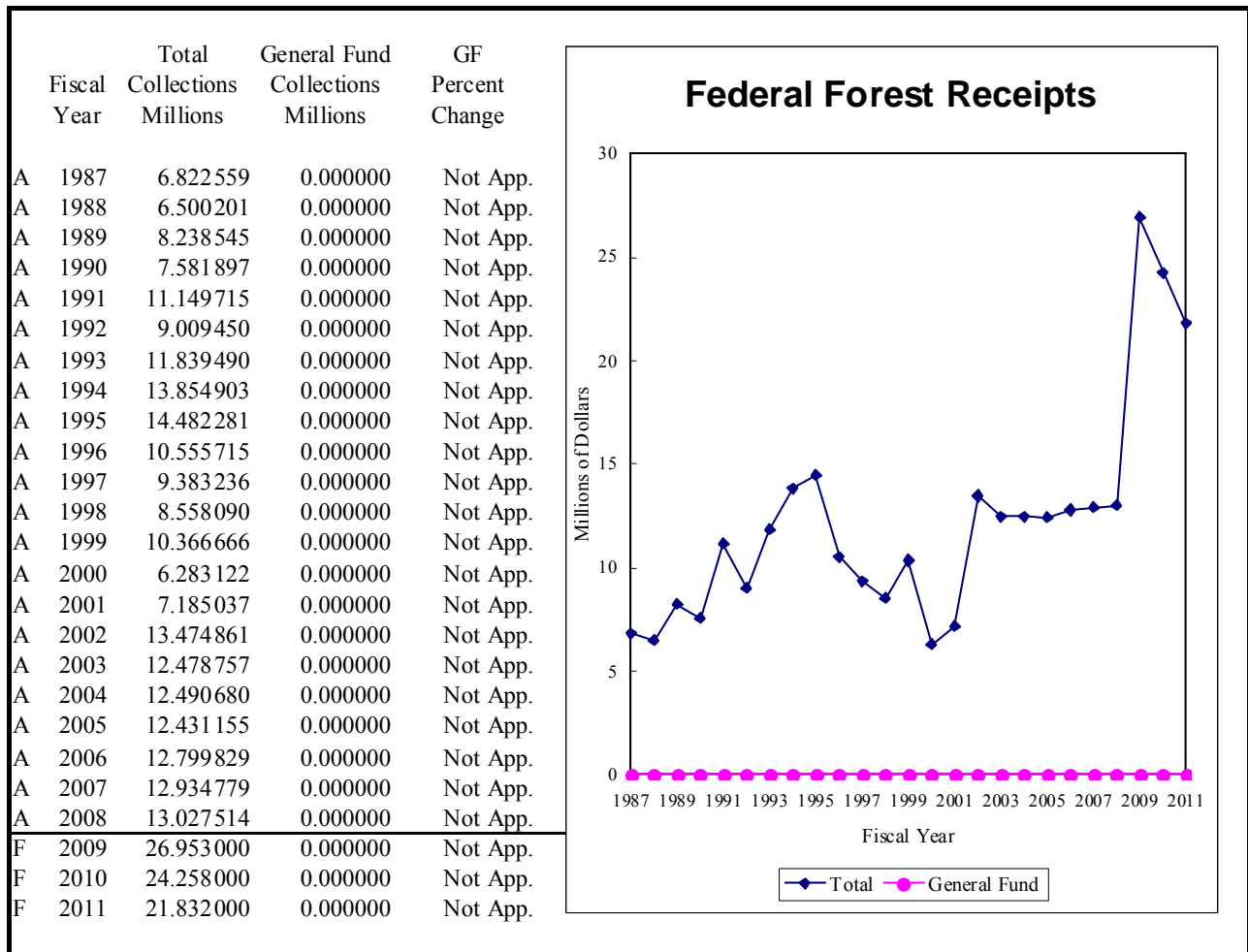
Total Tax = Secure Rural Schools Act - Federal Legislation

# Legislative Fiscal Division

## Revenue Estimate Profile

### Federal Forest Receipts

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Labor

**Contacts:** Montana Department of Labor, Montana Association of Counties

# Legislative Fiscal Division

## Revenue Estimate Profile Metalliferous Mines Tax

**Revenue Description:** The metalliferous mines license tax is imposed on the production of metals, gems or stones in the state. The tax rate is applied to the gross value of the product, which is defined as the market value of the commodity multiplied by the quantity produced. Senate Bill 30, enacted in the August 2002 special legislative session, revised the payment of taxes from once to twice a year. The first \$250,000 of value is exempt from taxation. A company taxed at both rates can claim both exemptions.

### Statutory Reference:

Tax Rate (MCA) – 15-37-103

Tax Distribution (MCA) – 15-37-117, 17-2-124(2)

Date Due – August 15<sup>th</sup> for period January through June, March 31<sup>st</sup> for period July through December (15-37-105)

**Applicable Tax Rate(s):** The tax rate for a 6-month period is as follows:

Gross value is defined as monetary amounts or refined metal received for the products less:

1. Basic treatment and refinery charges
2. Transportation costs from the mine to a mill or other processor
3. Quantity and price deductions
4. Interest
5. Penalty metal, impurity and moisture deductions

For concentrates shipped to a smelter, mill, or reduction work:		For gold, silver, or any platinum group metal that is dore*, bullion, or matte* and that is shipped to a refinery:	
<u>Gross Value</u>	<u>Rate</u>	<u>Gross Value</u>	<u>Rate</u>
\$0-\$250,000	Exempt	\$0-\$250,000	Exempt
\$250,001 and Above	1.81%	\$250,001 and Above	1.6%
		* Dore: A mixture of gold and silver in cast bars Matte: A crude mixture of sulfides formed in smelting sulfide ores of metals	

**Distribution:** The distribution of the metal mines tax has been altered several times since the 1990s. Prior to the 2005 legislature, the most recent change had been enacted by the 2001 legislature in Senate Bill 484 (effective July 1, 2002) that created a hard-rock mining reclamation debt service fund to pay debt service on the \$8.0 million of bonds authorized for state costs related to hard-rock mining reclamation, operation, and maintenance. The 8.5 percent allocation of metalliferous mines tax revenue previously allocated to the orphan share account was allocated to the hard-rock mining reclamation debt service fund. The 2005 legislature increased the allocation to counties from 24 percent to 25 percent and decreased the general fund allocation from 58 percent to 57 percent. The table below shows recent historical distributions of the tax revenue.

Distribution of Metalliferous Mines Tax (Percent)						
	<u>Fiscal</u> <u>1994-1995</u>	<u>Fiscal</u> <u>1996-1997</u>	<u>Fiscal</u> <u>1998-2002</u>	<u>Fiscal</u> <u>2003</u>	<u>Fiscal</u> <u>2004-2005</u>	<u>Fiscal</u> <u>2006&amp;Beyond</u>
General Fund	58.0	58.0	58.0	65.0	58.0	57.0
Counties *	25.0	25.0	24.0	24.0	24.0	25.0
Hard Rock Reclamation Debt Service	0.0	0.0	0.0	8.5	8.5	8.5
Natural Resources Operations**	0.0	4.8	7.0	0.0	7.0	7.0
Hard Rock Mining	1.5	1.5	2.5	2.5	2.5	2.5
RIT Trust	15.5	0.0	0.0	0.0	0.0	0.0
Groundwater Assessment	0.0	2.2	0.0	0.0	0.0	0.0
Abandoned Mines	0.0	8.5	0.0	0.0	0.0	0.0
Orphan Share	<u>0.0</u>	<u>0.0</u>	<u>8.5</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
	100.0	100.0	100.0	100.0	100.0	100.0
* Statutorily appropriated						
** Name changed by HB 116 in the 2007 session						

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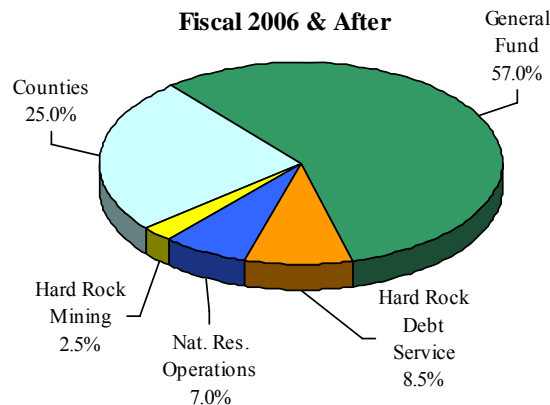
# Legislative Fiscal Division

## Revenue Estimate Profile

### Metalliferous Mines Tax

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#### Distribution Chart:



**Collection Frequency:** Biannually

#### **% of Total General Fund Revenue:**

FY 2004 – 0.23%	FY 2007 – 0.49%
FY 2005 – 0.34%	FY 2008 – 0.55%
FY 2006 – 0.41%	

#### **Revenue Estimate Methodology:**

The metalliferous mines tax is applied to the taxable gross value of production. The metalliferous mines tax estimate is developed by estimating the annual sales price for each type of metal produced and the anticipated production quantity of each metal by company. From these estimates, taxable gross value can be determined to which an effective tax rate is applied. Since all production and price information is reported on a calendar year basis, the resulting calendar year estimates are converted into fiscal year estimates.

#### Data

Mining companies are surveyed for anticipated production levels, general indications of applicable metal prices, and any possible changes in production due to expansion or contraction. Historical and future prices are obtained from various sources depending on the metal. Common sources include COMEX, NYMEX, and KITCO. In addition, a review is performed of historical trends, current literature on metals and metal prices, and companies' 10-Q reports. Data from biannual reports produced by DOR provide a history of production and prices by commodity and taxable gross value for each mining company. These companies are:

- |                         |                     |
|-------------------------|---------------------|
| * Golden Sunlight Mines | * Montana Resources |
| * Stillwater Mining     | * Holcim US         |
| * Montana Tunnels       | * Genesis           |

#### Analysis

The taxable value of metals is determined in a four-step process:

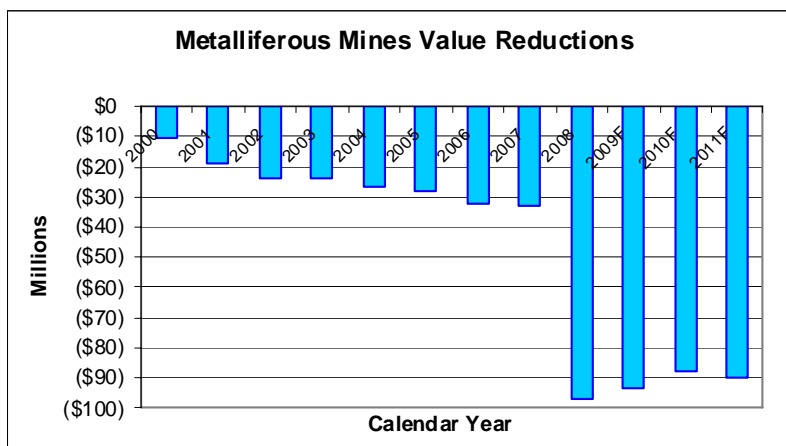
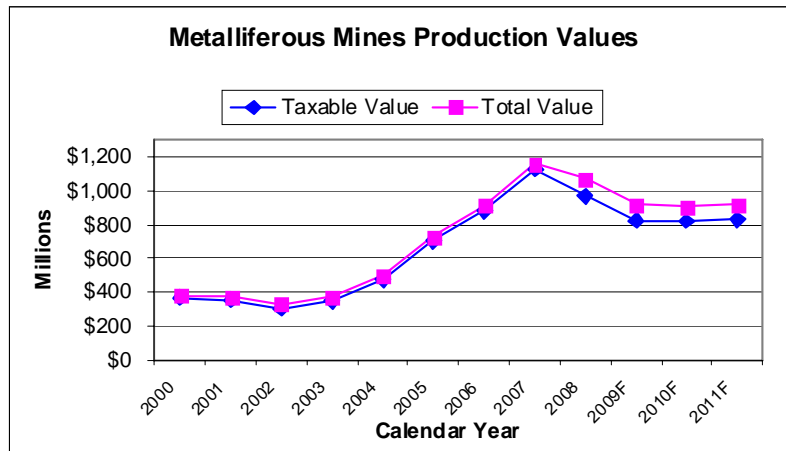
- As reported on the survey, future metals production for each company is summed by commodity. Amounts may be adjusted to fit with historical trends or if major changes are expected from historical production.
- To determine the future price for each metal, different techniques are used depending on the commodity and the reasonableness of future prices based on research of the literature and directions of future markets.
  - Copper, gold, silver, palladium, platinum - the price reported from the most recent half-year report is increased by the percentage growth for that year as shown on the futures market.
  - Lead, zinc, rhodium, molybdenum, nickel – the price for the last known calendar year is used for all future years.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Metalliferous Mines Tax

- The estimated production amount for each metal for all companies is summed and multiplied by the estimated price for that metal. This is done for each metal and the products summed to yield a total gross value.
- Total taxable value is obtained by reducing the total gross value by: a) the tax exempt amount of \$250,000/year for each company; and b) allowable treatment, refinery, transportation, and other costs.

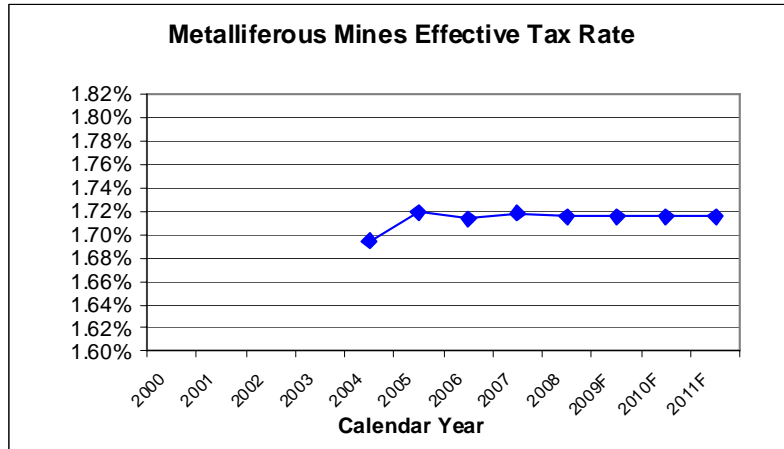


Taxable value is multiplied by an effective tax rate. Since a company's taxable value could be subject to two tax rates - 1.81 percent for concentrates shipped to a smelter, mill or reduction work and 1.6 percent for dore, bullion, or matte that is shipped to a refinery - an effective tax rate is used to capture both these rates. The effective tax rate for FY 2008 was rounded and used for the estimate. The rate is consistent with previous years. The estimate is obtained by multiplying the total taxable value by the effective tax rate.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Metalliferous Mines Tax

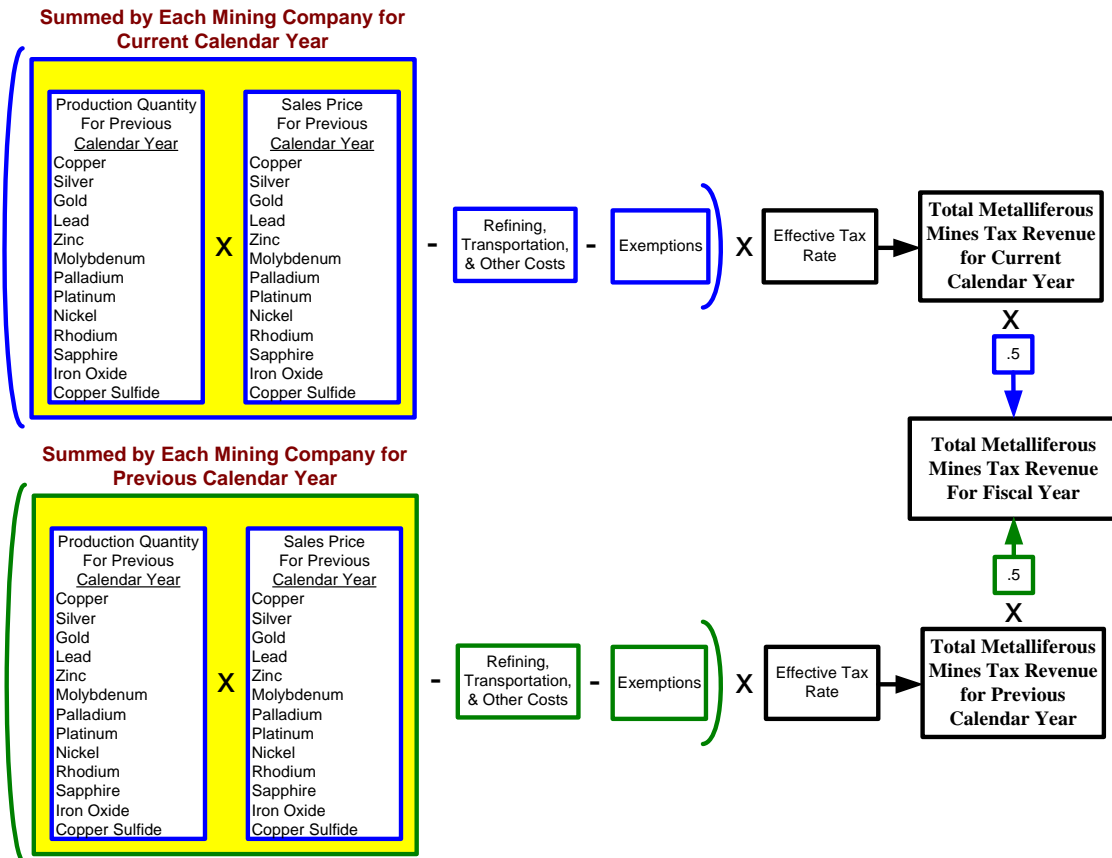


At this point the total represents estimates for calendar years. To convert the estimates to a fiscal year basis, half the previous calendar year's estimate is added to the half of the current calendar year's estimate.

#### Adjustments and Distribution

Once total tax revenue for each fiscal year is determined, the applicable distribution percentages are applied.

#### Forecast Methodology:



# Legislative Fiscal Division

## Revenue Estimate Profile

### Metalliferous Mines Tax

#### Revenue Estimate Assumptions:

	t	Total Tax	GF Tax	Tax Value CY	Effective CY	GF Allocation
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Rate</u>	<u>Percent</u>
Actual	2000	4.661371	2.703031	369.117889		57.9879%
Actual	2001	5.923752	3.417475	355.643466		57.6911%
Actual	2002	5.740242	3.329340	303.045425		58.0000%
Actual	2003	7.055900	4.586335	347.630082		65.0000%
Actual	2004	5.572191	3.231871	472.984838	0.016944	58.0000%
Actual	2005	9.076338	5.264276	702.353328	0.017192	58.0000%
Actual	2006	12.435050	7.028159	880.570599	0.017130	56.5189%
Actual	2007	15.774412	8.991415	1128.269293	0.017178	57.0000%
Actual	2008	18.902178	10.774242	1182.283494	0.017152	57.0000%
Forecast	2009	17.288000	9.854000	833.600711	0.017152	57.0000%
Forecast	2010	14.184000	8.085000	820.331019	0.017152	57.0000%
Forecast	2011	14.150000	8.066000	829.622626	0.017152	57.0000%

Comdty.	t	Copper	Silver	Gold	Lead	Zinc	Moly	Palladium
<u>Prod.</u>	<u>Cal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	4.311635	1.579330	0.291116	10.105733	21.461326		
Actual	2001	0.279519	0.867094	0.273483	14.750164	24.383338		
Actual	2002	0.594816	0.431664	0.147947	6.454187	9.594224		
Actual	2003	3.586936	0.422095	0.299258	10.620022	14.550050		
Actual	2004	73.520284	1.431613	0.044652	8.977044	17.050902		
Actual	2005	83.678136	1.970639	0.127334	9.190636	14.296209		
Actual	2006	83.170158	1.511962	0.113293	1.485809	2.587916		
Actual	2007	85.015492	2.104338	0.230927	11.181417	23.749088		
Actual	2008	73.969243	1.148831	0.195540	15.401940	42.565048		
Forecast	2009	70.998320	0.841177	0.024535	5.158125	13.280531		
Forecast	2010	71.028270	0.680010	0.009940	0.000000	0.000000		
Forecast	2011	71.059118	0.680311	0.010239	0.000000	0.000000		

Comdty.	t	Platinum	Nickel	Rhodium	Sapphire	Copper Sul	Deduction	Refining
<u>Prod.</u>	<u>Cal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000		0.000000		0.000000	0.000000		-10.330456
Actual	2001		0.626935		0.000000	0.000000		-18.811518
Actual	2002		1.254207		0.000000	0.000000		-23.786060
Actual	2003		1.378746		0.000000	0.000000		-23.933463
Actual	2004		1.282423		0.000000	0.000000	-1.000000	-26.616285
Actual	2005		1.306813		0.000000	0.000000	-1.000000	-27.774220
Actual	2006		1.584894		0.000000	0.000000	-1.000000	-32.059110
Actual	2007		1.171433		0.000000	0.000000	-1.000000	-32.784493
Actual	2008		0.985635		0.000000	0.000000	-1.000000	-96.640318
Forecast	2009		1.015201		0.000000	0.000000	-0.750000	-93.303150
Forecast	2010		1.045660		0.000000	0.000000	-0.500000	-87.824777
Forecast	2011		1.077030		0.000000	0.000000	-0.500000	-89.716016



# Legislative Fiscal Division

## Revenue Estimate Profile

### Metalliferous Mines Tax

Comdty. Price	t Cal	Copper Dollars	Silver Dollars	Gold Dollars	Lead Dollars	Zinc Dollars	Moly Dollars	Palladium Dollars
Actual	2000	0.646454	4.603820	276.279562	0.200607	0.502159		
Actual	2001	0.624133	4.067554	267.641016	0.217897	0.377707		
Actual	2002	0.644951	3.801359	312.723867	0.201686	0.368474		
Actual	2003	0.463017	5.229937	366.865992	0.280168	0.416065		
Actual	2004	1.038623	6.599440	411.438865	0.433676	0.498697		
Actual	2005	1.492033	7.003997	448.926031	0.448440	0.662373		
Actual	2006	3.288268	12.297368	601.550142	0.556520	1.555180		
Actual	2007	3.408364	12.861079	721.827872	1.288473	1.310738		
Actual	2008	3.892818	18.906472	927.947621	1.205309	0.987298		
Forecast	2009	3.465000	12.956000	730.474000	1.205309	0.987298		
Forecast	2010	3.503000	13.078000	744.581000	1.205309	0.987298		
Forecast	2011	3.503000	13.403000	770.418000	1.205309	0.987298		

Comdty. Price	t Cal	Platinum Dollars	Nickel Dollars	Rhodium Dollars	Sapphire Dollars	Copper Sul Dollars
Actual	2000				0.000000	0.000000
Actual	2001		2.024806		0.000000	0.000000
Actual	2002		2.905846		0.000000	0.000000
Actual	2003		4.101375		0.000000	0.000000
Actual	2004		6.300544		0.000000	0.000000
Actual	2005		5.956539		0.000000	0.000000
Actual	2006		10.044211		0.000000	0.000000
Actual	2007		16.905877		0.000000	0.000000
Actual	2008		12.086778		0.000000	0.000000
Forecast	2009		12.086778		0.000000	0.000000
Forecast	2010		12.086778		0.000000	0.000000
Forecast	2011		12.086778		0.000000	0.000000

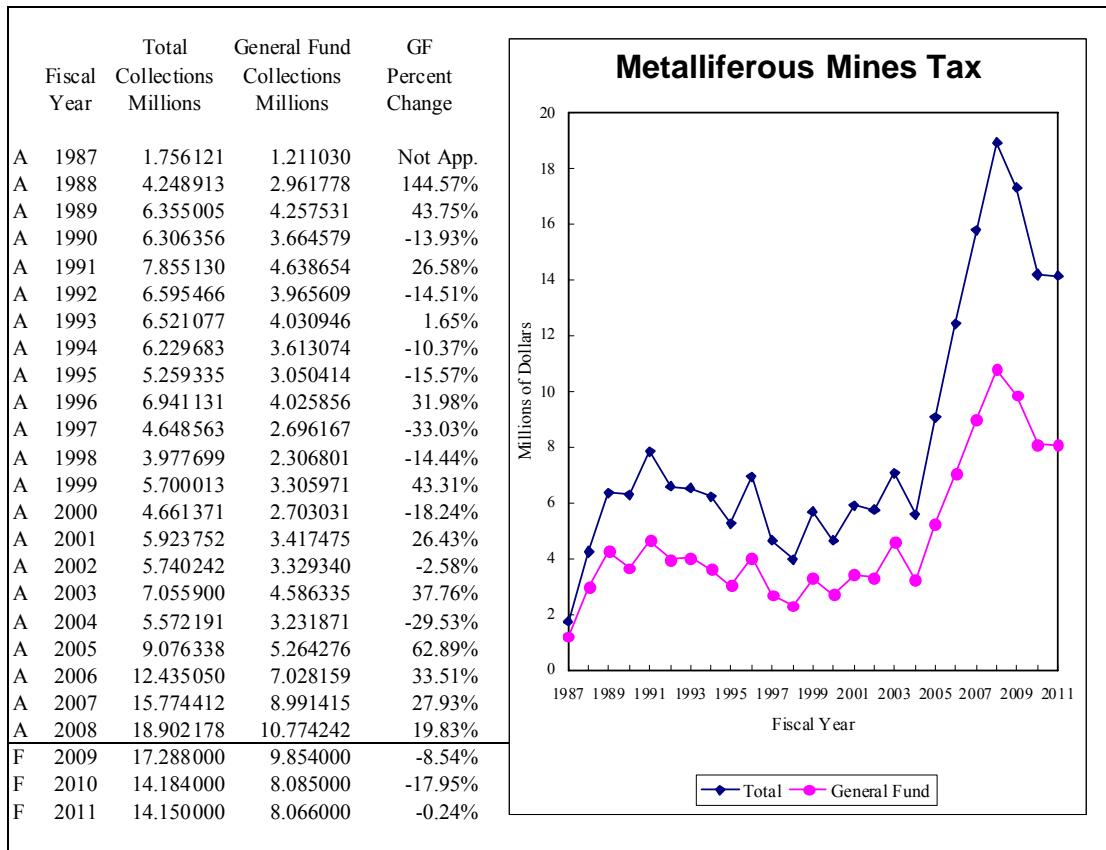
Total Tax = (Copper Prod. \* Copper Price + Silver Prod. \* Silver Price + Gold Prod. \* Gold Price +  
 Lead Prod. \* Lead Price + Zinc Prod. \* Zinc Price + Moly Prod. \* Moly Price +  
 Palladium Prod. \* Palladium Price + Platinum Prod. \* Platinum Price + Nickel Prod. \* Nickel Price +  
 Rodium Prod. \* Rodium Price + Deduction + Refining) \* Effective CY Rate  
 GF Tax = (Previous Cal. Total Tax + Current Cal. Total Tax) \* .5 \* GF Allocation

# Legislative Fiscal Division

## Revenue Estimate Profile

### Metalliferous Mines Tax

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue, *Wall Street Journal*, KITCO, COMEX, NYMEX, company 10K and 10Q reports

**Contacts:** Major Producers

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Oil and Natural Gas Production Tax

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**Revenue Description:** The oil and natural gas production tax is imposed on the production of petroleum and natural gas in the state. Gross taxable value of oil and natural gas production is based on the type of well and type of production. A portion of the revenue from the tax may be returned to Indian tribes per agreements between the Department of Revenue and the tribes.

#### Statutory Reference:

Tax Rate (MCA) – 15-36-304. Privilege and license tax – 82-11-131, Administrative Rules 36.72.1242

Tax Distribution (MCA) – 15-36-331(4), 15-36-332(2&3) (to taxing units)

Date Due – within 60 days after the end of the calendar quarter (15-36-311(1))

**Applicable Tax Rate(s):** The oil and natural gas production tax has numerous tax rates depending on several factors. These factors include whether the oil or gas is produced from a stripper well, a stripper incentive well, from a well initially drilled before 1999 or after, from a well newly drilled within the last year or 18 months, and whether the interest being taxed is the working interest or the royalty interest. The Board of Oil and Gas Conservation imposes an additional privilege and license (P & L) tax on all oil and natural gas tax rates. Starting October 2006 as set by the Board, the P&L tax rate is 0.09 percent. Based on this rate, HB 758 enacted by the 2005 legislature allows an additional tax rate of 0.17 percent to generate revenue for local impacts for local governments. The two taxes may not exceed 0.3 percent. The following table shows tax rate percentages for each type of pre-1999 oil and post-1999 oil, excluding the P & L tax and the new Local Impact tax. The quarterly tax rates on stripper production and on incremental production are lower than that for regular production unless the price of West Texas Intermediate averages above \$30 for the quarter. Similarly, the quarterly tax rate for stripper well exemption production (1-3 barrels a day) is lower than that for regular production unless the price of West Texas Intermediate averages above \$38 for the quarter.

<b>Oil Tax Rates</b> <b>15-36-304(5), MCA</b>	
<b><u>Working Interest</u></b>	
<b>Primary recovery production</b>	
First 12 months of qualifying production	0.5%
After 12 months:	
pre-1999 wells	12.5%
post-1999 wells	9.0%
<b>Stripper oil production (&gt;3 and &lt; 15 barrels/day if oil &lt;\$30)</b>	
1 through 10 barrels a day production	5.5%
>10 through 14 barrels a day production	9.0%
<b>Stripper oil production (&gt;3 and &lt; 15 barrels/day if oil &gt;=\$30)</b>	
	*
<b>Stripper wells (3 barrels or less/day)</b>	
Stripper well exemption production (if oil <\$38)	0.5%
Stripper well bonus production (if oil >=\$38)	6.0%
<b>Horizontally completed well production</b>	
First 18 months of qualifying production	0.5%
After 18 months	
pre-1999 wells	12.5%
post-1999 wells	9.0%
<b>Incremental production (if oil &lt;\$30/barrel)</b>	
New or expanded secondary recovery production	8.5%
New or expanded tertiary production	5.8%
<b>Incremental production (if oil &gt;=\$30/barrel)</b>	
Pre-1999 wells	12.5%
Post-1999 wells	9.0%
<b>Horizontally recompleted well</b>	
First 18 months	5.5%
After 18 months	
pre-1999 wells	12.5%
post-1999 wells	9.0%
<b><u>Nonworking Interest</u></b>	14.8%

\* No stripper tax rate. Taxed at primary recovery rates. See 15-36-303(22a)

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Oil and Natural Gas Production Tax

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Natural Gas Tax Rates 15-36-304(2), MCA	
<b><u>Working Interest</u></b>	
<b>Qualified production</b>	
First 12 months	0.5%
After 12 months	
	pre-1999 14.8%
	post-1999 9.0%
<b>Stripper natural gas pre-1999 wells</b>	11.0%
<b>Horizontally completed well production</b>	
First 18 months of qualifying production	0.5%
After 18 months	9.0%
<b><u>Nonworking Interest</u></b>	14.8%

**Distribution:** Once the oil and natural gas production taxes have been collected, the revenue is first distributed based on the amounts collected from the P & L and Local Impact taxes. The amounts from the P & L tax are distributed to the Board of Oil and Gas Conservation. The amounts from the Local Impact tax are distributed to the oil, gas, and coal natural resource state special revenue account. The amounts received by Board and the oil, gas, and coal natural resource account vary based on a sliding tax scale based on the P & L tax set by the Board. Counties producing oil and natural gas receive the next share of total revenue with each county having its own statutory distribution percentage of total revenue, including the revenue generated by the P & L and Local Impact taxes. A portion of the revenue may be returned to Indian tribes per agreements between the Department of Revenue and the tribes. The remainder of the revenue is distributed to other state accounts in the following manner:

Fiscal 2008 through Fiscal 2011

- Coal bed methane account – 1.23%
- Natural resources projects account – 1.45%
- Natural resources operations account – 1.45%
- Orphan share account – 2.99%
- University system 6 mill levy account – 2.65%
- General fund – the remainder (90.23%)

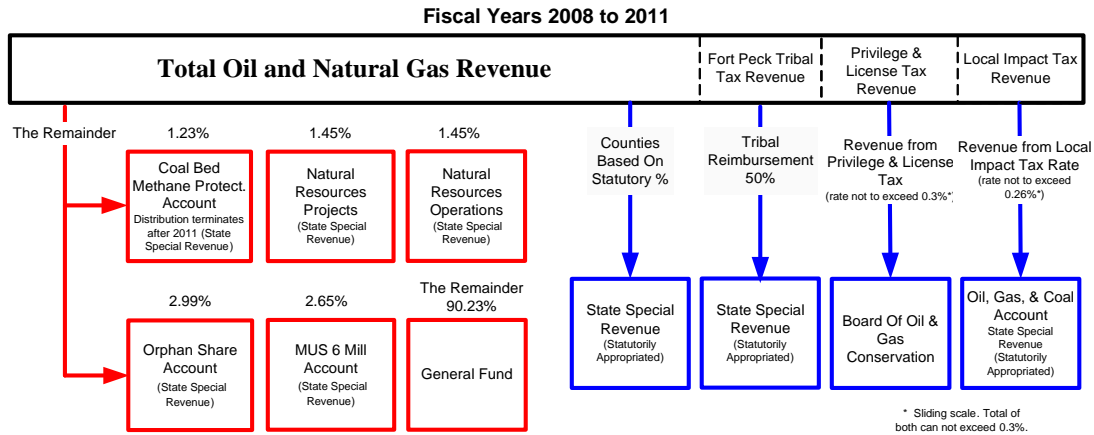
The distributions of county shares and the amount of oil and natural gas production tax revenue deposited in the oil, gas, and coal natural resource account are statutorily appropriated and are based on the statutorily set percentages for each county.

# Legislative Fiscal Division

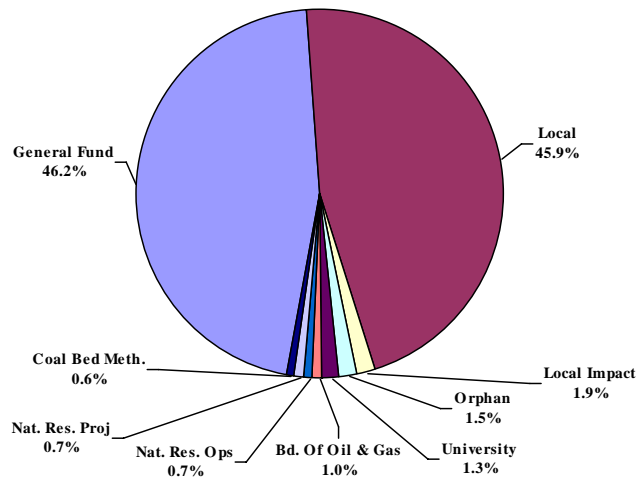
## Revenue Estimate Profile

### Oil and Natural Gas Production Tax

#### Distribution Chart:



**Oil & Natural Gas Production Tax Revenue**  
Based on FY 2008 Actual Amounts of \$324.311 Million



Because the exact distribution of oil & natural gas revenue will vary depending on various factors, the chart only reflects fiscal 2008 actual distributions. Please see the table above for exact distribution percentages.

**Collection Frequency:** Quarterly: The oil and natural gas production tax is due 60 days after the end of the production quarter.

#### **% of Total General Fund Revenue:**

FY 2004 – 2.99%	FY 2007 – 5.25%
FY 2005 – 4.09%	FY 2008 – 7.64%
FY 2006 – 5.42%	

#### **Revenue Estimate Methodology:**

The estimate for oil and natural gas revenue is derived from estimating the price and specific production subject to varying tax rates from which value can be obtained. Specific statutory tax rates are used for the types of oil and natural gas that are taxed differently.

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Oil and Natural Gas Production Tax

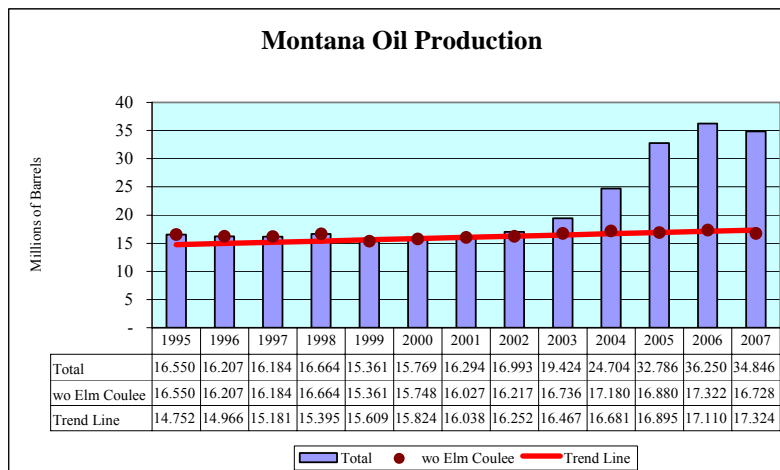
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#### Data

Data from the Board of Oil and Gas Conservation are used extensively to isolate monthly historical production of oil and natural gas by field and by individual well. Global Insight provides future estimates of West Texas Intermediate oil and national well head natural gas prices. Production, price, value, and revenue collections, by oil type, are provided on a quarterly basis by the Department of Revenue.

#### Oil Analysis

- Production - The estimate is developed on a quarterly basis with production from the Elm Coulee field separate from all other production. Analysis of the field data indicates that the majority of the increased production is from the relatively new Elm Coulee field in Richland County. The importance of this one field can be seen in the figure below.



Industry personnel state that this field peaked October 2006. If so, fewer new wells will be spudded (drilling initiated). Existing wells will then follow a production decline curve unique to the characteristics of the field. Fields tapped through horizontal drilling, such as Elm Coulee, tend to be depleted more rapidly than those tapped vertically. Future production from completed wells can be estimated by developing a normalized production decline curve from the producing wells. In doing so, the difficulty of having different starting time for each well can be eliminated by averaging each well's production from a common time point. The result is a curve that represents the average production of wells in the Elm Coulee field by month of production. Production from future wells can be estimated by applying the production curve coefficients to an estimate of future spudded wells. Knowing monthly production from each well and the date it was placed into production are essential for estimating oil tax revenue because tax rates vary based on the length of time a well has been in production. The dynamics in the timing of when wells enter and fall out of the various tax rates and the changes in production at the various stages is complex, but needs to be modeled to ensure accurate estimates.

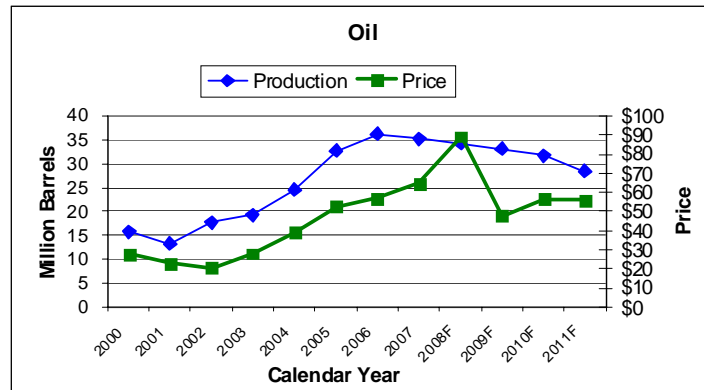
Production from all other fields is also estimated on a quarterly basis and by the different taxation types. For each quarter, the estimate is derived by multiplying the same quarter of the previous year by the ratio of the results of a regression analysis for the same quarter of the current and the previous year. The results for each tax type are then summed and the quarterly results are summed by year.

- Price – The price for each quarter is estimated by adjusting the Global Insight West Texas Intermediate oil price for that quarter by the ratio of the previous three year average Montana price to the three year average of the Global Insight price.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Oil and Natural Gas Production Tax



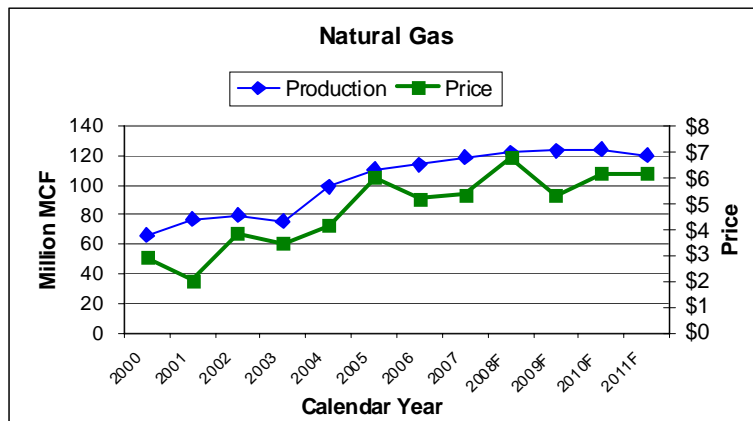
Once production and prices have been estimated, the value can be calculated by the product of the two. The quarterly value of each tax type is then multiplied by the applicable tax rate to obtain the estimate. The sum of the revenue from all tax types for each fiscal year determines the oil production revenue estimate.

#### Natural Gas Analysis

- **Production** - The natural gas industry in Montana has also been undergoing major changes. Improved techniques have allowed new fields to be developed and old fields to be more productive. Data from the Board of Oil and Gas Conservation indicate that the majority of increased production is from the same two fields that were the major contributors to the natural gas production tax in the 2009 biennium, but are now joined by other important contributing fields – St. Joe Road, Pennel, CX, Tiger Ridge, Bowdoin, and Cedar Creek. A normalized production curve is developed for each of these fields. As with oil, the development of a normalized production curve from individual wells eliminates the difficulty of having different starting time for each well by averaging each well's production from a common point in time. The result is a curve that represents the average production of wells in these by month of production. With the equations of these curves, future production can be estimated.

Production from all other fields is also estimated on a quarterly basis and by the different taxation types. For each quarter, the estimate is derived by multiplying the same quarter of the previous year by the ratio of the results of a regression analysis for the same quarter of the current and the previous year. The results for each tax type are then summed and the quarterly results are summed by year.

- **Price** – The price for each quarter is estimated by adjusting the Global Insight West Texas national well head price for that quarter by the ratio of the previous three year average Montana price to the three year average of the Global Insight price.



# Legislative Fiscal Division

## Revenue Estimate Profile

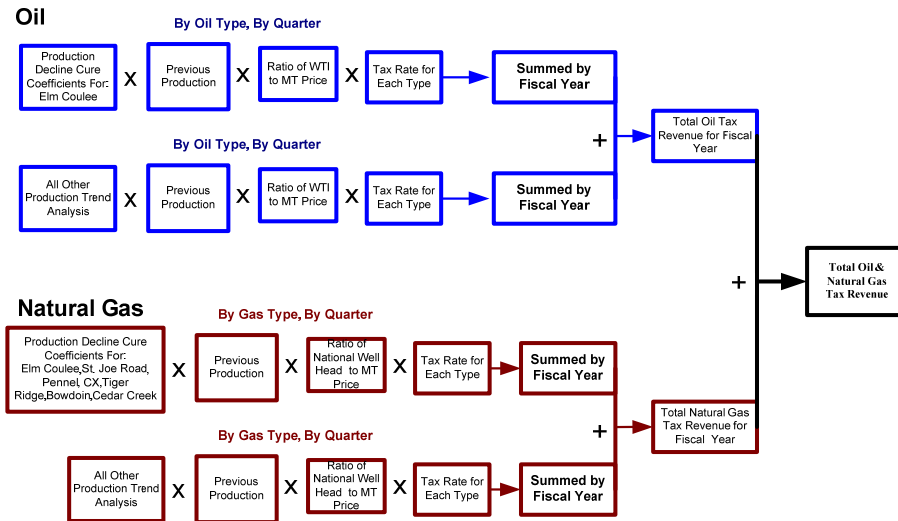
### Oil and Natural Gas Production Tax

Once production and prices have been estimated, the value can be calculated by the product of the two. The quarterly value of each tax type is then multiplied by the applicable tax rate to obtain the revenue. The sum of the revenue from all tax types for each fiscal year determines the natural gas revenue estimate.

#### Adjustments and Distribution

Once the oil and natural gas estimates have been summed, the distribution formula is applied with the amounts to the Board of Oil and Gas and to local governments distributed first and the remainder subject to statutory percentages.

#### Forecast Methodology:



#### Revenue Estimate Assumptions:

	t	Total Tax	GF Tax	GF Allocation	Audits	Total Tax	Total Tax
	Fiscal	Millions	Millions	Percent	Millions	Oil	Gas
						Millions	Millions
Actual	2000	43.772950	11.362741	0.259584			
Actual	2001	92.395790	25.791723	0.279144			
Actual	2002	50.303610	12.902439	0.256491			
Actual	2003	73.389376	29.086038	0.396325	2.436178		
Actual	2004	92.676050	41.323718	0.445894	1.687625	58.480000	30.645000
Actual	2005	137.754331	62.625939	0.454620	1.127243	99.999000	39.955000
Actual	2006	203.681078	92.562800	0.454450	1.428545	145.916000	59.042000
Actual	2007	209.946350	96.334992	0.458855	1.242493	161.830000	48.631000
Actual	2008	324.311270	149.993826	0.462500	3.168372	263.159000	60.712000
Forecast	2009	260.295000	116.771182	0.448611	1.000000	203.613000	55.683000
Forecast	2010	223.057000	100.065807	0.448611	1.500000	161.686000	59.871000
Forecast	2011	234.451000	105.177281	0.448611	1.500000	167.778000	65.173000



# Legislative Fiscal Division

## Revenue Estimate Profile

### Oil and Natural Gas Production Tax

<u>Oil</u>	<u>t</u>	<u>Barrels</u>	<u>Price</u>	<u>Gross Value</u>	<u>Effective</u>	<u>Tax</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Per Barrel</u>	<u>Millions</u>	<u>Tax Rate</u>	<u>Millions</u>
Actual	2000					
Actual	2001					
Actual	2002					
Actual	2003					
Actual	2004	21.755195	30.844774	671.034087	0.087149	58.480075
Actual	2005	28.643376	45.556521	1304.892528	0.076634	99.998585
Actual	2006	35.095391	57.329257	2011.992730	0.072523	145.916163
Actual	2007	36.201663	55.824501	2020.939756	0.080076	161.829675
Actual	2008	34.640362	85.345505	2956.399229	0.089013	263.158834
Forecast	2009	33.691506	65.255891	2198.569259	0.092612	203.612871
Forecast	2010	32.464004	52.157087	1693.227867	0.095490	161.686304
Forecast	2011	30.110000	56.296473	1695.086798	0.098979	167.777980

<u>Gas</u>	<u>t</u>	<u>MCF's</u>	<u>Price</u>	<u>Gross Value</u>	<u>Effective</u>	<u>Tax</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Per MCF</u>	<u>Millions</u>	<u>Tax Rate</u>	<u>Millions</u>
Actual	2000					
Actual	2001					
Actual	2002					
Actual	2003					
Actual	2004	91.783052	3.740240	343.290668	0.089268	30.644967
Actual	2005	105.086763	4.485594	471.376542	0.084762	39.954600
Actual	2006	112.475960	6.354795	714.761690	0.082604	59.042467
Actual	2007	116.234254	5.255464	610.864953	0.079611	48.631473
Actual	2008	121.083091	6.445792	780.476368	0.077788	60.711596
Forecast	2007	122.539502	5.514450	675.737909	0.082403	55.682735
Forecast	2008	123.579002	5.832863	720.819435	0.083060	59.870928
Forecast	2009	121.841500	6.186088	753.722216	0.086469	65.173286

<u>Oil</u>	<u>t</u>	<u>Barrels</u>	<u>Price</u>	<u>Gross Value</u>	<u>Effective</u>	<u>Total Tax</u>
	<u>Cal</u>	<u>Millions</u>	<u>Per Barrel</u>	<u>Millions</u>	<u>Tax Rate</u>	<u>Millions</u>
Actual	2000					
Actual	2001					
Actual	2002					
Actual	2003	19.329005	28.035377	541.895949	0.091632	49.654833
Actual	2004	24.630583	38.989706	960.339199	0.082092	78.835902
Actual	2005	32.677136	52.762390	1724.123800	0.072677	125.303767
Actual	2006	36.195677	57.142848	2068.324076	0.075427	156.007969
Actual	2007	35.275113	64.763336	2284.533999	0.084668	193.426261
Actual	2008	34.258000	89.199897	3055.810067	0.091383	279.249702
Forecast	2009	33.125000	47.778956	1582.677921	0.094892	150.182742
Forecast	2010	31.803000	56.367585	1792.658291	0.096022	172.134717
Forecast	2011	28.417000	56.216888	1597.515305	0.102297	163.421243

# Legislative Fiscal Division

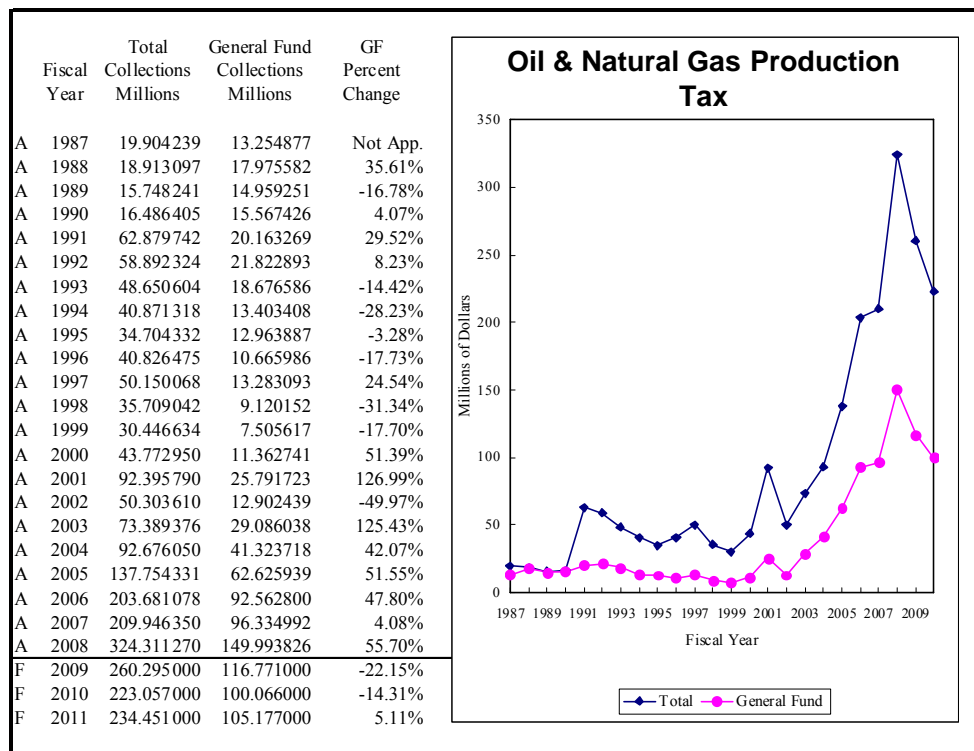
## Revenue Estimate Profile

### Oil and Natural Gas Production Tax

<u>Gas</u>	<u>t</u>	<u>MCF's</u>	<u>Price</u>	<u>Gross Value</u>	<u>Effective</u>	<u>Total Tax</u>
	<u>Cal</u>	<u>Millions</u>	<u>Per MCF</u>	<u>Millions</u>	<u>Tax Rate</u>	<u>Millions</u>
Actual	2000					
Actual	2001					
Actual	2002					
Actual	2003	75.488126	3.469441	261.901631	0.092653	24.265877
Actual	2004	99.080392	4.153472	411.527652	0.085933	35.363671
Actual	2005	110.440134	6.003194	662.993595	0.082978	55.013925
Actual	2006	113.578458	5.204711	591.143004	0.081529	48.195074
Actual	2007	118.820828	5.346010	635.217309	0.078109	49.615909
Actual	2008	121.729000	6.775628	824.790394	0.080140	66.098861
Forecast	2009	123.350000	5.327232	657.114106	0.082527	54.229629
Forecast	2010	123.808000	6.164525	763.217570	0.083531	63.752425
Forecast	2011	119.875000	6.151781	737.444753	0.089470	65.979162

Total Tax = Barrels \* Price \* Tax Rate + MCF's \* Price \* Tax Rate + Audits  
GF Rev = Total Tax \* GF Allocation + Audits

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue, Global Insight, *Wall Street Journal*

**Contacts:** Department of Revenue, Board of Oil & Gas

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# Legislative Fiscal Division

## Revenue Estimate Profile Resource Indemnity Tax

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**Revenue Description:** The state imposes a resource indemnity and ground water assessment (RIGWA) tax on the gross value of coal (based on the contract sales price), as well as most minerals, but not metals, oil, and natural gas. Prior to July 1, 2002 when the Governor by executive order certified to the Secretary of State that the resource indemnity trust balance had reached \$100 million, a portion of oil and natural gas taxes had been distributed under the same methodology as the RIGWA tax. Once the RIT balance reached \$100 million, this portion of oil and natural gas taxes no longer has a connection to the RIGWA tax. The RIGWA tax on all other production is specific to each resource as described below.

### Statutory Reference:

Tax Rate (MCA) – 15-38-104

Tax Distribution (MCA) – 15-38-106

Date Due from metal producers – March 31st following the end of the calendar year (15-38-105, 15-38-106(1))

Date Due from mineral producers – 60 days following the end of the calendar year (15-38-105, 15-38-106(1))

### Applicable Tax Rate(s):

 The applicable rates are as follows:

Coal: \$25 plus 0.4% of the gross value of coal produced in the preceding year in excess of \$6,250

Minerals: \$25 plus 0.5% of the gross value of minerals (excluding metals and excluding oil and natural gas because the resource indemnity trust has reached \$100 million) produced in the preceding year in excess of \$5,000

Talc: \$25 plus 0.4% of the gross value of talc produced in the preceding year in excess of \$625

Vermiculite: \$25 plus 2.0% of the gross value of vermiculite produced in the preceding year in excess of \$1,250

Limestone: \$25 plus 10.0% of the gross value of limestone produced in the preceding year in excess of \$250

Garnets: \$25 plus 1.0% of the gross value of garnets produced in the preceding year in excess of \$2,500

**Distribution:** Beginning fiscal 2004, the amount needed to cover debt service on CERCLA bonds (after amounts transferred from the CERCLA cost recovery account) is deposited to the CERCLA match debt service account. Beginning fiscal 2008, the remainder of RIGWA tax proceeds is distributed in the following order:

1. \$366,000 each year to the ground water assessment account
2. \$150,000 to the water storage account for the 2009 biennium only
3. 50.0% of the remainder split evenly between the environmental quality protection fund and the hazardous waster/CERCLA account
4. the remainder to the natural resources projects account

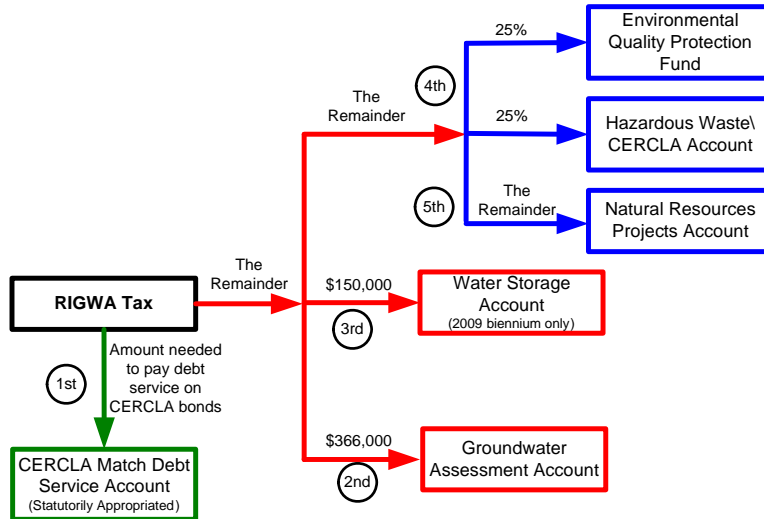
# Legislative Fiscal Division

## Revenue Estimate Profile

### Resource Indemnity Tax

#### Distribution Chart:

#### Beginning Fiscal 2008



**Collection Frequency:** Annually - the tax is paid on or before March 31 of the year following the production year.

**% of Total General Fund Revenue:** N/A

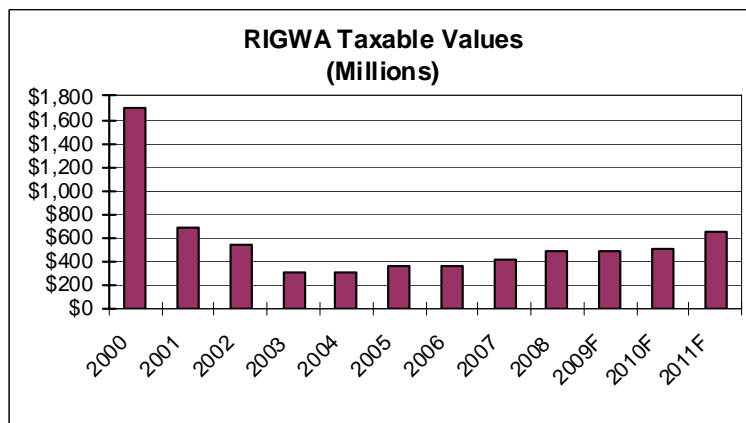
#### Revenue Estimate Methodology:

##### Data

The data used to estimate the resource indemnity and groundwater assessment (RIGWA) tax are obtained from the coal severance tax source, the property tax source, and the state accounting system (SABHRS). No adjustments are required on the raw data in preparation for analysis.

##### Analysis

The RIGWA tax is imposed on the gross taxable value from the production of coal and miscellaneous mines. Before fiscal 2002, when Governor Martz certified that the resource indemnity trust had reached the required principal amount of \$100 million, oil and natural gas production was also taxed under RIGWA, but the oil and natural gas component of the tax ended when the trust reached the limit. The gross value estimates prepared for the coal severance tax and class 1 property tax (miscellaneous minerals) are used in the estimate for the RIGWA tax.



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# Legislative Fiscal Division

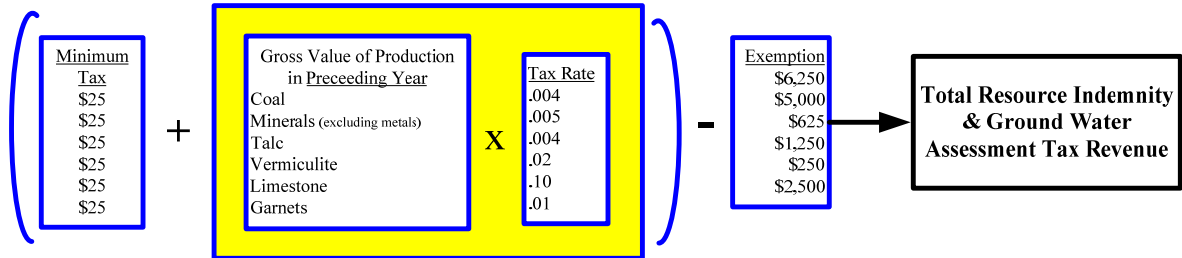
## Revenue Estimate Profile Resource Indemnity Tax

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The future taxable value of coal, produced by all mines, is estimated in the coal severance tax source. The estimate of coal value is \$364.7 million, \$506.7 million, and \$497.9 million in fiscal 2009 through fiscal 2011, respectively. The future taxable value of other mineral production is estimated at the FY 2008 amount.

To develop the estimates for RIGWA tax collections, the tax rates are applied to the production value of each of the components, coal and other minerals. The tax estimates for the two components are summed to produce the total estimate of the RIGWA tax.

### Forecast Methodology:



# Legislative Fiscal Division

## Revenue Estimate Profile Resource Indemnity Tax

### Revenue Estimate Assumptions:

	t	Total Tax	GF Tax	Oil	Natural Gas	Coal	Metals	Other
	Fiscal	Millions	Millions	Millions	Millions	Millions	Millions	Millions
Actual	2000	6.793459	0.000000	0.851792	0.159668	1.034506	0.000000	0.288596
Actual	2001	2.744480	0.000000	1.667407	0.000000	0.951681	0.001862	0.123529
Actual	2002	2.200785	0.000000	0.976477	0.000000	0.998816	0.000460	0.225031
Actual	2003	1.225610	0.000000	0.000000	0.000000	1.005490	0.000000	0.220121
Actual	2004	1.250528	0.000000	0.001614	0.000000	0.965537	0.000000	0.284991
Actual	2005	1.436378	0.000000	0.000000	0.000000	1.118400	0.000000	0.317978
Actual	2006	1.456411	0.000000	0.000000	0.000000	1.086862	0.000000	0.369549
Actual	2007	1.646918	0.000000	0.000000	0.000000	1.211936	0.000000	0.434981
Actual	2008	1.925989	0.000000	0.000000	0.000000	1.366020	0.000000	0.559970
Forecast	2009	1.987000	0.000000	0.000000	0.000000	1.426768	0.000000	0.559970
Forecast	2010	2.019000	0.000000	0.000000	0.000000	1.458942	0.000000	0.559970
Forecast	2011	2.587000	0.000000	0.000000	0.000000	2.026609	0.000000	0.559970

	t	Trust Other	Trust Metal	Renewable	Ground	Reclamation	Orphan
	Fiscal	Millions	Millions	Millions	Millions	Millions	Millions
Actual	2000	3.391472	0.000000	0.000000	0.521579	1.440204	1.440204
Actual	2001	2.205880	0.000000	0.000000	0.300000	0.119300	0.119300
Actual	2002	1.588631	0.000000	0.000000	0.300000	0.156077	0.156077
Actual	2003	0.000000	0.000000	0.000000	0.366000	0.429805	0.279805
Actual	2004	-0.000188	0.000000	0.000000	0.366000	0.442358	0.442358
Actual	2005	0.252454	0.000000	0.000000	0.113546	0.535189	0.441681
Actual	2006	0.000000	0.000000	0.000000	0.366000	0.451163	0.451162
Actual	2007	0.000000	0.000000	0.000000	0.366000	0.508562	0.508562
Actual	2008	0.000000	0.000000	0.000000	0.366000	0.000000	0.000000
Forecast	2009	0.000000	0.000000	0.000000	0.366000	0.000000	0.000000
Forecast	2010	0.000000	0.000000	0.000000	0.366000	0.000000	0.000000
Forecast	2011	0.000000	0.000000	0.000000	0.366000	0.000000	0.000000

	t	Scholarship	Debt	Water	Protection	CERCLA	Projects	Trust
	Fiscal	Millions	Service	Storage	Fund	Account	Account	Balance
		Millions	Millions	Millions	Millions	Millions	Millions	Millions
Actual	2000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.821952
Actual	2001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	4.979333
Actual	2002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	4.782041
Actual	2003	0.150000	0.000000	0.000000	0.000000	0.000000	0.000000	6.037436
Actual	2004	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	4.527135
Actual	2005	0.093508	0.000000	0.000000	0.000000	0.000000	0.000000	5.164977
Actual	2006	0.000000	0.188086	0.000000	0.000000	0.000000	0.000000	4.501162
Actual	2007	0.000000	0.263794	0.000000	0.000000	0.000000	0.000000	2.581901
Actual	2008	0.000000	0.273056	0.150000	0.283985	0.283985	0.567954	2.299375
Forecast	2009	0.000000	0.296156	0.150000	0.293711	0.293711	0.587422	1.538190
Forecast	2010	0.000000	0.296156	0.000000	0.339211	0.339211	0.678422	1.403826
Forecast	2011	0.000000	0.296156	0.000000	0.481211	0.481211	0.962422	1.024122

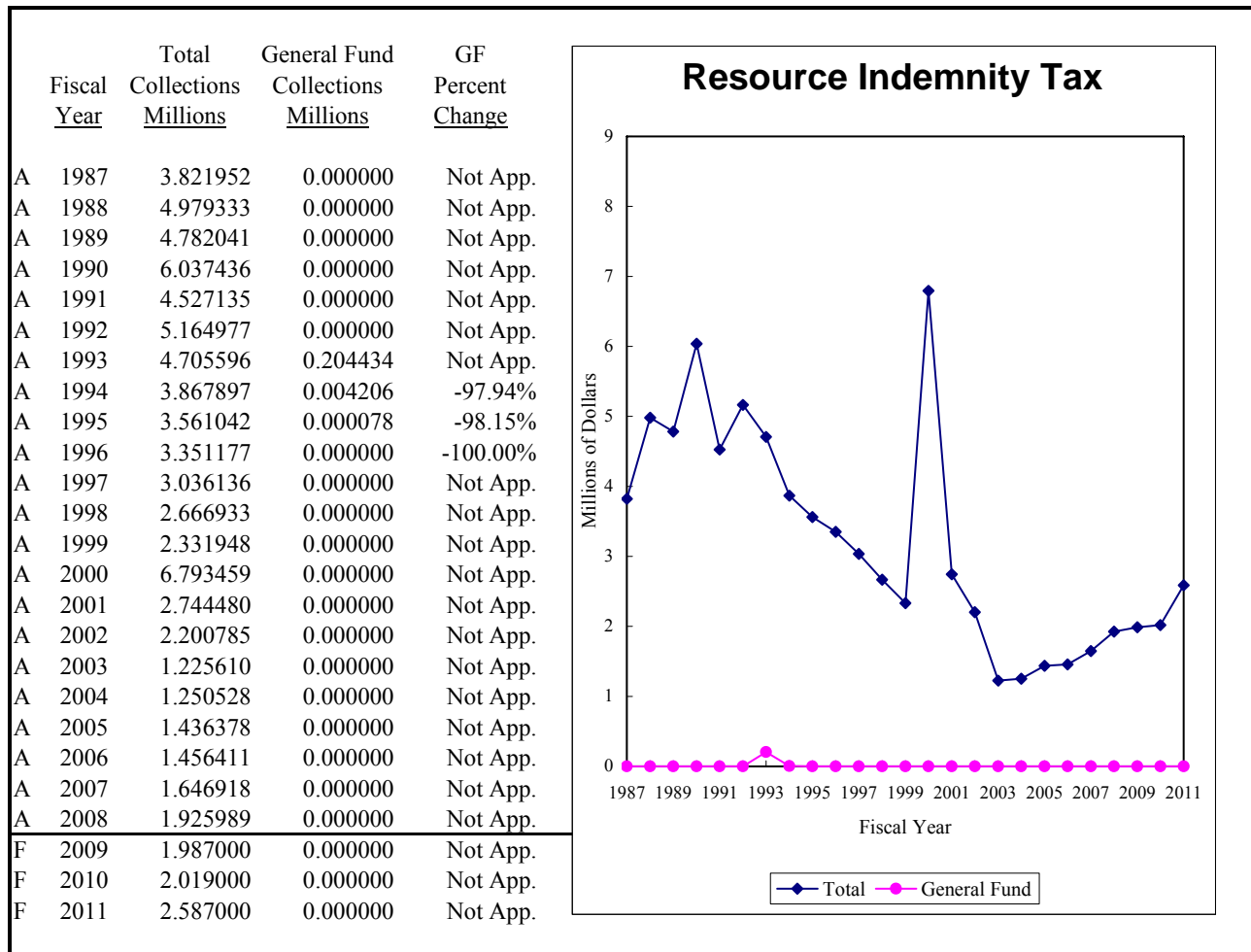
Total Tax = Coal + Other

# Legislative Fiscal Division

## Revenue Estimate Profile

### Resource Indemnity Tax

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue, Surveys of Various Companies

**Contacts:** Department of Revenue

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# Legislative Fiscal Division

## Revenue Estimate Profile

### US Mineral Royalty

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**Revenue Description:** Under the federal Mineral Lands Leasing Act (30 USC, Section 191), 50.0 percent of all sales, bonuses, royalties, and rentals received from federal lands in Montana must be paid to the state. However due to federal legislation, during the period of October 2007 through September 2008 state shares were 48.0 percent. Federal Mineral Management Services personnel state that the budget request for the current federal fiscal year continues the reduced rate and it is assumed the reduction will continue. The money is to be used as the legislature may direct, giving priority to those subdivisions of the state socially or economically impacted by development of minerals leased under the federal act. The revenue produced on federal public lands includes royalties and bonuses from oil, gas, coal, and other mineral exploration and extraction.

#### Statutory Reference:

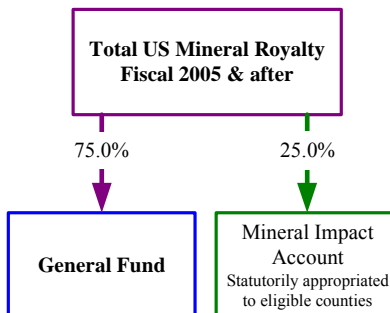
Tax Rate – NA

Distribution – 17-3-240, MCA

**Applicable Tax Rate(s):** N/A

**Distribution:** With the enactment of Senate Bill 212 by the 2005 legislature, receipts are deposited 75 percent to the general fund and 25 percent to the state special revenue mineral impact account. Money in the mineral impact account is statutorily appropriated for distribution to eligible counties in which the minerals were extracted.

#### Distribution Chart:



**Collection Frequency:** Monthly

#### % of Total General Fund Revenue:

FY 2004 – 2.08%

FY 2007 – 1.54%

FY 2005 – 1.78%

FY 2008 – 1.85%

FY 2006 – 1.72%

#### Revenue Estimate Methodology:

The estimate for Montana's share of mineral royalties and other mineral related income from its federal lands is derived from estimating each of the major sources of revenue, applying the applicable royalty rate for each, and multiplying by Montana's share of the revenue.

#### Data

Data from which to base estimates for this revenues source have been sparse and incomplete. Up until October 2001, the Mineral Management Service of the U.S. Department of Interior had provided data used to make the estimate. However, lawsuits and court orders have stifled the flow of data since then. Only recently has yearly data been available for federal fiscal years through 2007. The current estimates rely on these data, future prices of oil and natural gas, and coal production on federal land obtained from a survey of Montana's coal companies.



# Legislative Fiscal Division

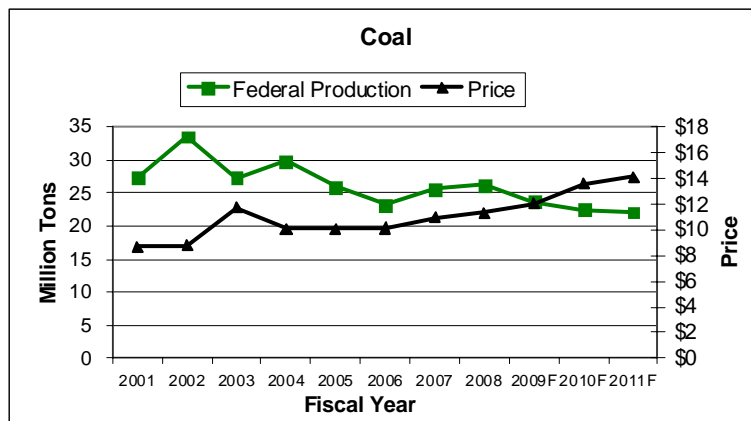
## Revenue Estimate Profile

### US Mineral Royalty

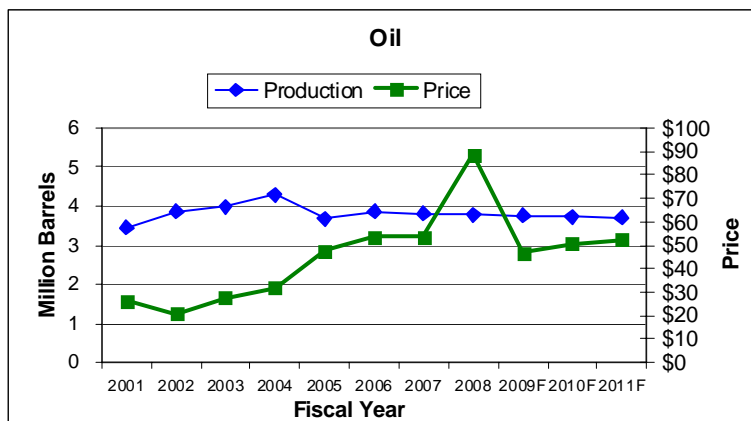
#### Analysis

The estimate is derived by first estimating the individual revenue components. The estimate for mineral royalties is obtained by multiplying together estimates for production, price, the applicable royalty rate, and Montana's percentage share.

- Coal – Calendar year production is estimated by multiplying the calendar year production reported by each company on the coal survey by the percent of production each anticipated to be from federal lands multiplied by a federal fiscal year conversion factor. Price is determined by calculating a federal fiscal year growth by converting the calendar year Montana contract sales price into a federal fiscal year price and determining the growth between the current and previous years. Production multiplied by price yields value. The value is then multiplied by the royalty rate for the last known federal fiscal year 2007. This royalty rate is used for all estimated years. Of the total calculated royalty, Montana receives a portion. Although the state portion is 50 percent (prior to the 2 percent reduction), actual receipts from calendar year 2007 indicate an actual rate of 49.6 percent. This rate is used for all estimated years.



- Oil – Federal fiscal year production is estimated by multiplying the current years amount by the growth between it and the previous year. Yearly prices are determined by first averaging quarterly future prices of West Texas Intermediate oil as forecast by Global Insight, based on the federal fiscal year, for the current and previous year. Price for the current federal fiscal year is determined by multiplying current year's Global Insight price by the ratio of the previous year's estimated (or actual) price to Global Insight price for the previous year. Production multiplied by price yields value. The value is then multiplied by the royalty rate. The actual royalty rate for federal fiscal year 2007 is used for all estimated years. Of the total calculated royalty, Montana receives a portion. Although the state portion is 50 percent (prior to the 2 percent reduction), actual receipts from calendar year 2007 indicate an actual rate of 46.2 percent. This rate is used for all estimated years.



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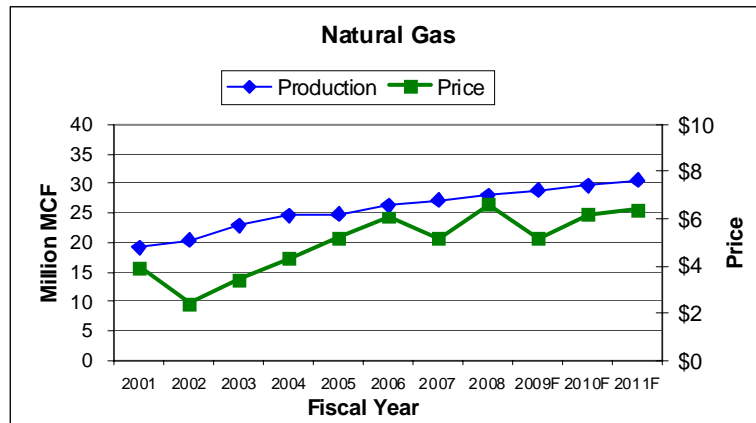
# Legislative Fiscal Division

## Revenue Estimate Profile

### US Mineral Royalty

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- Natural Gas – Calendar year production is estimated by multiply the previous year’s production by the growth rate of the two previous years. Yearly prices are determined by first averaging quarterly future prices of well head natural gas as forecast by Global Insight, based on the federal fiscal year, for the current and previous year. The current year price is then multiplied by the ratio of the previous year’s price to the previous year’s estimated (or actual) price. Production multiplied by price yields value. The value is then multiplied by the royalty rate. The actual royalty rate for federal fiscal year 2007 is used for all estimated years. Of the total calculated royalty, Montana receives a portion. Although the state portion is 50 percent (prior to the 2 percent reduction), actual receipts from calendar year 2007 indicate an actual rate of 47.3 percent. This rate is used for all estimated years.



- Natural Gas Liquid – Federal fiscal year production is estimated by carrying the 2007 actual amounts into all of the estimated years. Yearly prices are determined by first averaging quarterly future prices of well head natural gas as forecast by Global Insight, based on the federal fiscal year, for the current and previous year. The current year price is then multiplied by the ratio of the previous year’s price to the previous year’s estimated (or actual) price. Production multiplied by price yields value. The value is then multiplied by the royalty rate. The actual royalty rate for federal fiscal year 2007 is used for all estimated years. Of the total calculated royalty, Montana receives a portion. Although the state portion is 50 percent (prior to the 2 percent reduction), actual receipts from calendar year 2007 indicate an actual rate of 49.8 percent. This rate is used for all estimated years.
- Methane – Federal fiscal year production is estimated by carrying the 2007 actual amounts into all of the estimated years. Yearly prices are determined by first averaging quarterly future prices of national well head natural gas as forecast by Global Insight, based on the federal fiscal year, for the current and previous year. The current year price is then multiplied by the ratio of the previous year’s price to the previous year’s estimated (or actual) price. Production multiplied by price yields value. The value is then multiplied by the royalty rate. The actual royalty rate for federal fiscal year 2007 is used for all estimated years. Of the total calculated royalty, Montana receives a portion. Although the state portion is 50 percent (prior to the 2 percent reduction), actual receipts from calendar year 2007 indicate an actual rate of 36.3 percent. This rate is used for all estimated years.
- Other Royalty – No other royalty is anticipated.
- Rents, Bonuses, and Other – The amounts from actual federal fiscal year 2007 are used for all estimated years. To obtain Montana’s share, these amounts are adjusted by the ratio of the last known Montana’s amount to the last known total revenue.

#### Adjustments and Distribution

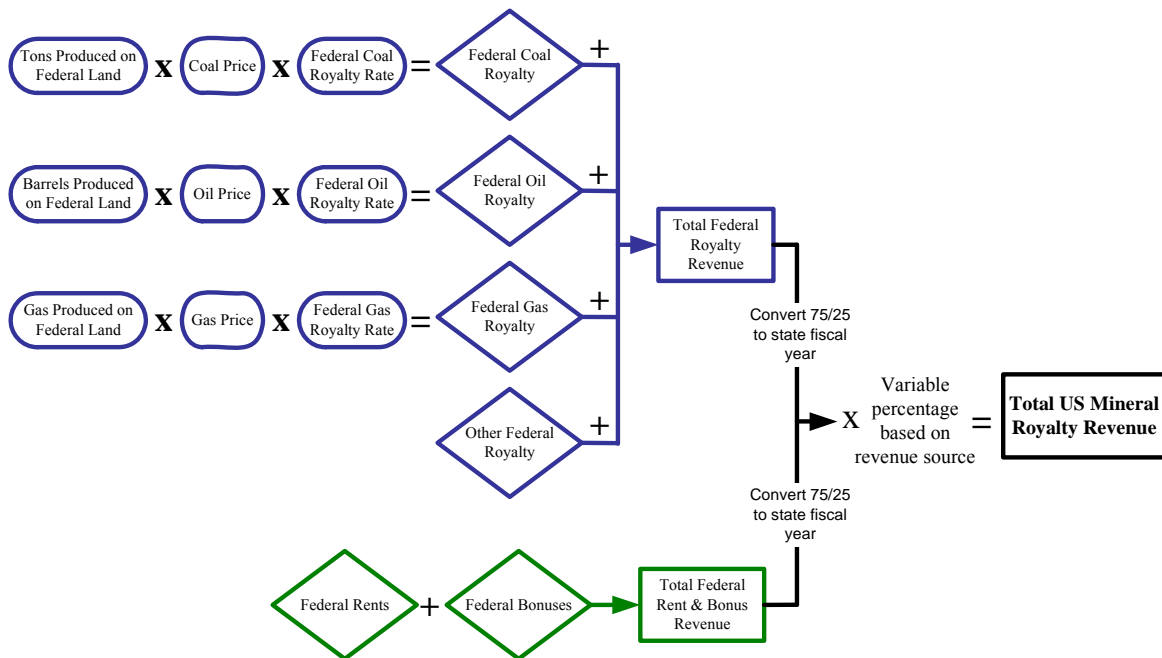
Since the estimates are based on the federal fiscal year and on a distribution percentage of 50 percent, two adjustments are required: 1) to convert to a state fiscal year a 25/75 split is used; and 2) to capture the anticipated two percent reduction in distribution, the 50 percent distribution is backed out from the totals and replaced by 48 percent. The total amount of anticipated revenue is distributed 75 percent to the general fund and 25 percent to the state special revenue fund.

# Legislative Fiscal Division

## Revenue Estimate Profile

### US Mineral Royalty

#### Forecast Methodology:



#### Revenue Estimate Assumptions:

	t	Total Rev.	GF Rev.	One-Time	Mineral	GF Allocation
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Settlement</u>	<u>Impact</u>	<u>Percent</u>
				<u>Millions</u>	<u>Millions</u>	
Actual	2000	19.242954	19.242954			
Actual	2001	31.007874	31.007874	6.038000		
Actual	2002	19.772193	19.772193	0.000000		
Actual	2003	25.989828	25.989828	0.000000		
Actual	2004	28.736303	28.736303	0.000000		
Actual	2005	36.391633	27.293725	0.000000	9.097908	75.00%
Actual	2006	39.071469	29.303602	0.000000	9.767867	75.00%
Actual	2007	37.627625	28.220719	0.000000	9.406906	75.00%
Actual	2008	48.518079	36.388559	0.000000	12.129520	75.00%
Forecast	2009	37.678000	28.259000	0.000000	9.420000	75.00%
Forecast	2010	42.024000	31.518000	0.000000	10.506000	75.00%
Forecast	2011	43.340000	32.505000	0.000000	10.835000	75.00%

# Legislative Fiscal Division

## Revenue Estimate Profile

### US Mineral Royalty

	<u>t</u> <u>Cal</u>	<u>Oil</u> <u>Barrels</u>	<u>Coal</u> <u>Tons</u>	<u>Gas</u> <u>MCF's</u>	<u>Oil</u> <u>Price</u>	<u>Coal</u> <u>Price</u>	<u>Gas</u> <u>Price</u>
Actual	2000						
Actual	2001						
Actual	2002	3.862811	33.491273	20.391778	20.655800	8.794516	2.417834
Actual	2003	3.974831	27.206486	23.003369	27.508280	11.709884	3.445458
Actual	2004	4.295711	29.780631	24.537832	31.980751	10.053941	4.355901
Actual	2005	3.679243	25.938193	24.766597	47.473867	10.040273	5.214713
Actual	2006	3.844671	23.192308	26.324243	53.695739	10.122990	6.086452
Actual	2007	3.816472	25.579860	27.127282	53.649261	10.954688	5.165048
Actual	2008	3.788480	25.846250	27.954818	88.599344	11.306980	6.603003
Forecast	2009	3.760693	23.608250	28.807599	46.630546	11.991471	5.178700
Forecast	2010	3.733110	22.447750	29.686395	50.680861	13.537771	6.182055
Forecast	2011	3.705729	22.040750	30.591999	52.342529	14.074503	6.401701

	<u>t</u> <u>Cal</u>	<u>Oil</u> <u>Roy. Rate</u>	<u>Coal</u> <u>Roy. Rate</u>	<u>Gas</u> <u>Roy. Rate</u>	<u>Oil</u> <u>Revenue</u>	<u>Coal</u> <u>Revenue</u>	<u>Gas</u> <u>Revenue</u>
Actual	2000						
Actual	2001						
Actual	2002	0.113443	0.116053	0.124149	9.051530	34.182163	6.121055
Actual	2003	0.113266	0.117664	0.123688	12.384542	37.485837	9.803198
Actual	2004	0.111631	0.114227	0.120545	15.335865	34.200945	12.884411
Actual	2005	0.108074	0.121958	0.116781	18.877129	31.761055	15.082359
Actual	2006	0.111309	0.122188	0.112109	22.978867	28.686728	17.962305
Actual	2007	0.110286	0.121099	0.111545	22.581177	33.934181	15.629039
Actual	2008	0.110286	0.121099	0.111545	37.018251	35.390339	20.589617
Forecast	2009	0.110286	0.121099	0.111545	19.340102	34.282842	16.640943
Forecast	2010	0.110286	0.121099	0.111545	20.865806	36.801078	20.471065
Forecast	2011	0.110286	0.121099	0.111545	21.391870	37.566436	21.845065

	<u>t</u> <u>Cal</u>	<u>Other</u> <u>Royalty</u>	<u>Rent&amp;Bonus</u> <u>Revenue</u>	<u>Other</u> <u>Revenue</u>	<u>Total</u> <u>Revenue</u>	<u>State</u> <u>Share</u>	<u>State Share</u> <u>Percent</u>
Actual	2000						
Actual	2001						
Actual	2002	0.680620	3.182765	0.293468	53.511601	22.328620	0.417267
Actual	2003	1.017980	7.105370	1.572410	69.369337	25.535373	0.368107
Actual	2004	0.505445	5.008854	1.800082	69.735602	30.294622	0.434421
Actual	2005	4.413216	4.751567	0.975580	75.860906	35.406360	0.466727
Actual	2006	4.013599	4.616071	1.096967	79.354537	38.000735	0.478873
Actual	2007	2.637757	5.049745	1.094695	80.926594	38.918463	0.480911
Actual	2008	3.497748	5.049745	1.094695	102.640395	47.465902	0.462449
Forecast	2009	2.743265	5.049745	1.094695	79.151592	37.678037	0.476024
Forecast	2010	3.274763	5.049745	1.094695	87.557152	42.024359	0.479965
Forecast	2011	3.391114	5.049745	1.094695	90.338925	43.340587	0.479755

Total Rev. = (Oil Barrels \* Oil Price \* Oil Roy. Rate + Coal Tons \* Coal Price \* Coal Roy. Rate + Gas MCF's \* Gas Price \* Gas Roy. Rate + Other Royalty + Rent&Bonus Revenue + Other Revenue) \* State Share

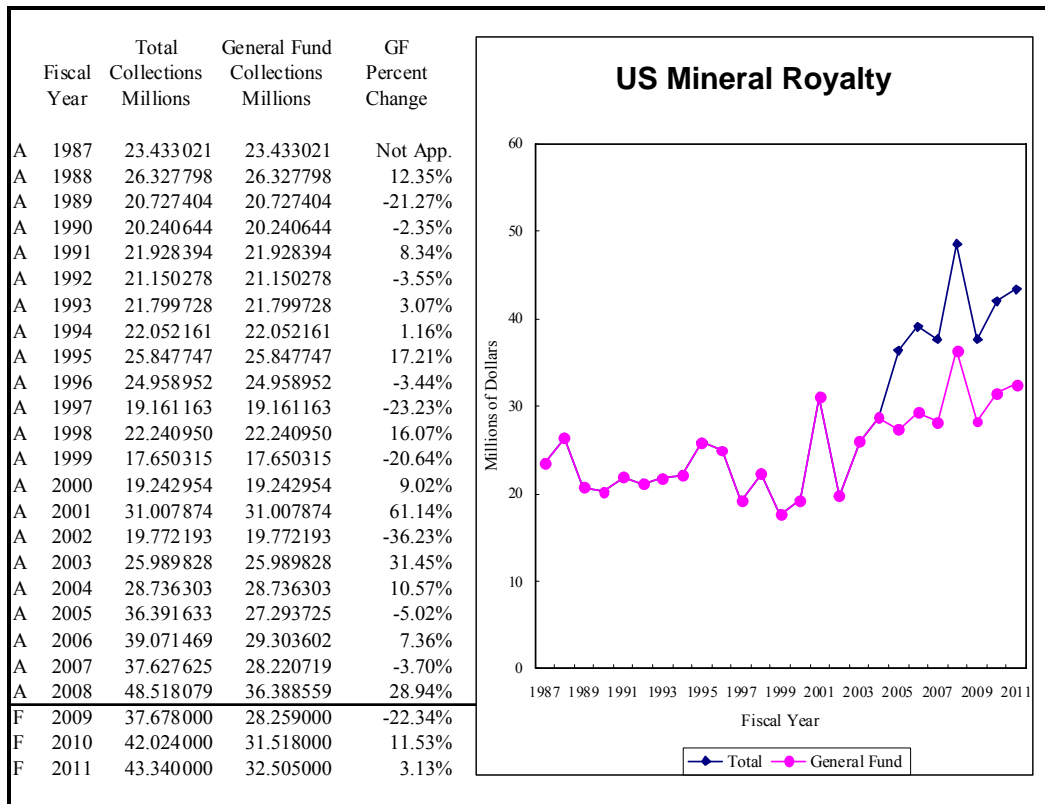
GF Rev. = Total Rev \* GF Allocation

# Legislative Fiscal Division

## Revenue Estimate Profile

### US Mineral Royalty

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue

**Contacts:** U.S. Minerals Management Service

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Wholesale Energy Tax

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**Revenue Description:** The wholesale energy transaction tax, enacted by the 1999 legislature (HB 174 effective January 1, 2000) is imposed on the amount of electricity transmitted by a transmission services provider in the state.

**Statutory Reference:**

Tax Rate (MCA) – 15-72-104(1)

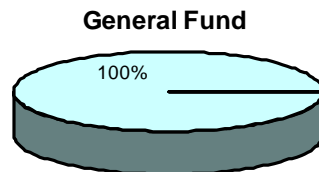
Tax Distribution (MCA) – 15-72-106(3)

Date Due – 30<sup>th</sup> day of the month following the end of the calendar quarter (15-72-110)

**Applicable Tax Rate(s):** The tax rate of 0.015 cent is applied to the number of kilowatt hours transmitted (or \$0.15 per megawatt). If the electricity is produced in-state and sold out-of-state, the taxpayer is the person(s) owning the electrical generation property, and the tax is collected by the transmission services provider. If the electricity is produced in-state for delivery in-state, or is produced outside the state for delivery in-state, the taxpayer is the distribution services provider, and the tax is collected by the transmission services provider. The tax does not apply to: 1) electricity that is transmitted through the state that is neither produced nor consumed in the state; 2) electricity generated in the state by an agency of the federal government for delivery outside the state; 3) electricity delivered to a distribution services provider that is a municipal utility or a rural electric cooperative which opts out of competition under HB 390 (1997 legislature); 4) electricity delivered to a purchaser that received its power directly from a transmission or distribution facility owned by an entity of the US government; 5) electricity meeting certain contractual requirements that is delivered by a distribution services provider that was first served by a public utility after December 31, 1996; 6) electricity that has been subject to the transmission tax in another state; and 7) a 5 percent line loss exemption for transmission of electricity produced in the state for delivery outside of the state.

**Distribution:** All proceeds are deposited into the general fund.

Distribution Chart:



**Collection Frequency:** Quarterly

**% of Total General Fund Revenue:**

FY 2004 – 0.24%

FY 2007 – 0.20%

FY 2005 – 0.22%

FY 2008 – 0.20%

FY 2006 – 0.22%

**Revenue Estimate Methodology:**

The wholesale energy transaction tax is applied to the number of kilowatt hours transmitted less five percent for line loss on out-of-state transmissions. The estimate for the tax revenue is derived by estimating the annual taxable kilowatt hours transmitted for each company and any company anticipated to be transmitting within the 3-year period in question. From these estimates, the tax rate is applied. Since all kilowatt hours transmitted is reported on a calendar year basis, the resulting calendar year estimates are converted into fiscal year estimates.

# Legislative Fiscal Division

## Revenue Estimate Profile

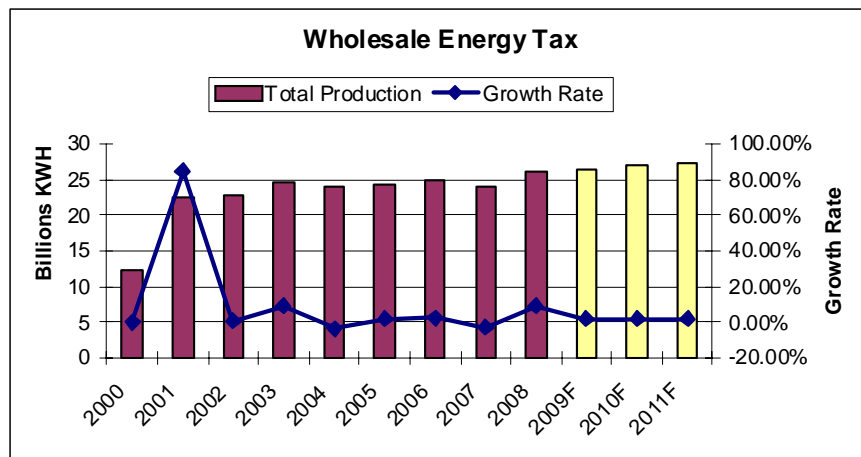
### Wholesale Energy Tax

#### Data

All energy transmitting companies are surveyed for anticipated kilowatt hours transmitted, anticipated new transmissions, anticipated downtime or reduced transmission, and a percentage split between in-state and out-of-state transmissions. Results of the survey were incomplete and were not used in the estimate. Data from quarterly reports produced by DOR provide a history of in-state and out-of-state kilowatt hours transmitted by each individual company.

#### Analysis

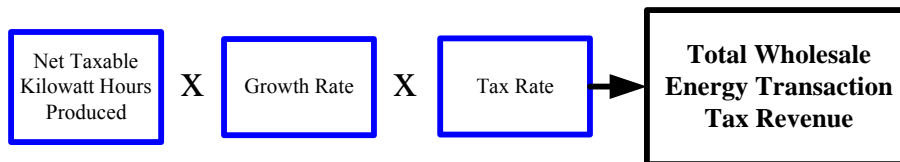
A number of different techniques can be used to develop the revenue estimate for this source. Choosing a technique depends on whether the technique passes the “reasonable” test. The technique based on historical data was used in this analysis. A growth rate based on total yearly production from FY 2001 to FY 2008 actual amounts for both in-state and out-of-state production. The totals are added for each year and allowable line loss is calculated and subtracted from the yearly total. Net taxable kilowatt hours are multiplied by the tax rate to derive total revenue from this source.



#### Adjustments and Distribution

Once total tax revenue for each fiscal year is determined, the applicable distribution percentage, 100 percent to the general fund, is applied.

#### **Forecast Methodology**



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Wholesale Energy Tax

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#### Revenue Estimate Assumptions:

	t	Total Tax	GF Tax	KWH Fiscal	Line	Credits	Tax
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Loss Fiscal</u> <u>Millions</u>	<u>Millions</u>	<u>Rate</u>
Actual	2000	1.894704	1.894704	12273.924051	373.483823	0.000000	0.000150
Actual	2001	3.503427	3.503427	22658.110488	673.956373	0.000000	0.000150
Actual	2002	2.906263	2.906263	22775.157501	697.796150	0.000000	0.000150
Actual	2003	3.532056	3.532056	24780.402486	730.789478	0.000000	0.000150
Actual	2004	3.292659	3.292659	23961.126405	725.187200	0.000000	0.000150
Actual	2005	3.370263	3.370263	24326.536427	749.863350	0.000000	0.000150
Actual	2006	3.813495	3.813495	24870.822230	758.471450	0.000000	0.000150
Actual	2007	3.651024	3.651024	24070.520901	709.589400	0.000000	0.000150
Actual	2008	3.856112	3.856112	26192.843079	796.685100	0.000000	0.000150
Forecast	2009	3.870000	3.870000	26606.873350	809.278301	0.000000	0.000150
Forecast	2010	3.931000	3.931000	27027.448197	822.070564	0.000000	0.000150
Forecast	2011	3.993000	3.993000	27454.671071	835.065033	0.000000	0.000150

Total Tax = (KWH Fiscal - Line Loss Fiscal) \* Tax Rate - Credits

GF Tax = Total Tax

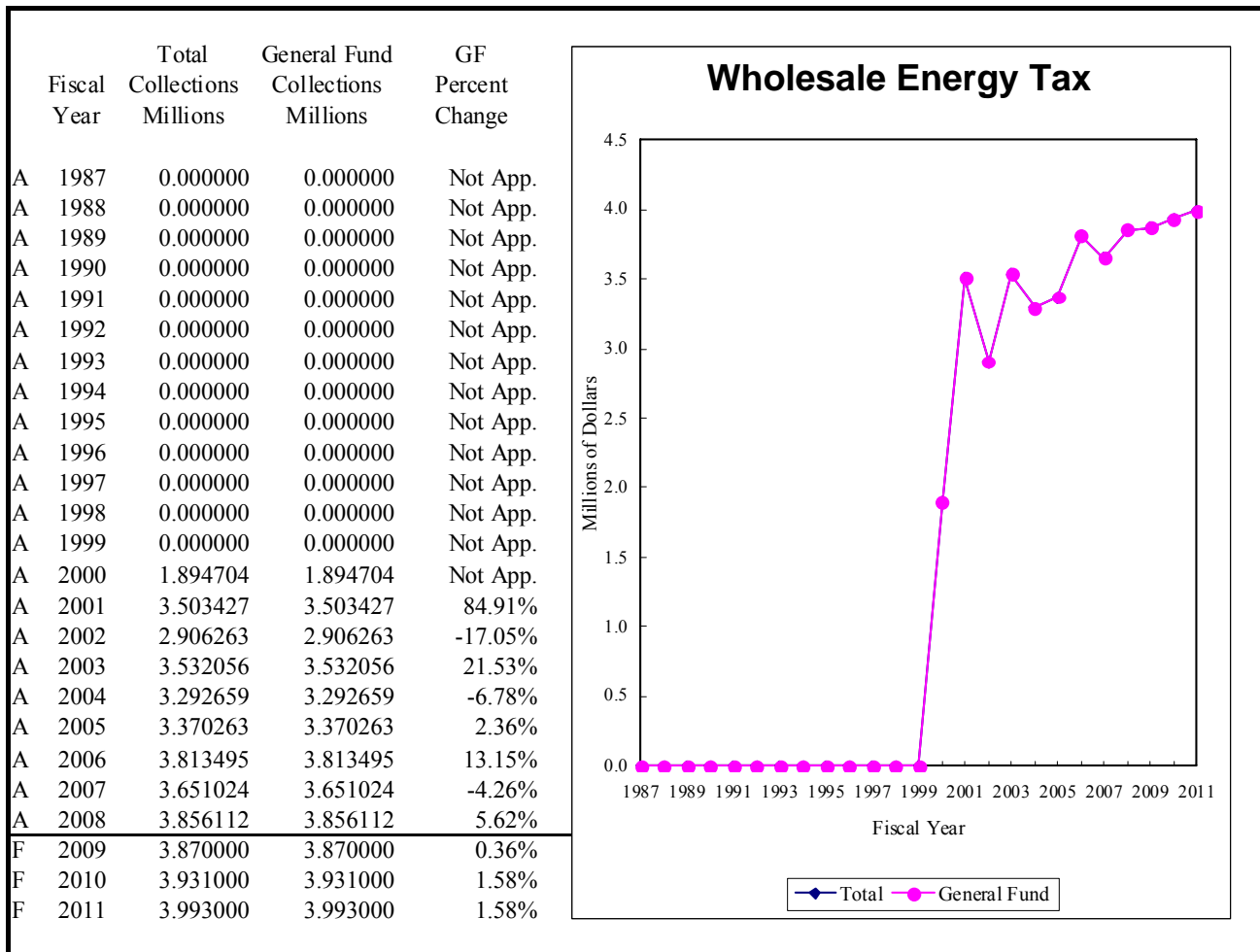


# Legislative Fiscal Division

## Revenue Estimate Profile

### Wholesale Energy Tax

#### Revenue Projection:



**Data Source(s):** SABHRS, Department of Revenue Wholesale Energy Tax Returns, Global Insight, *Wall Street Journal*

**Contacts:** Transmission companies' financial personnel, Department of Revenue